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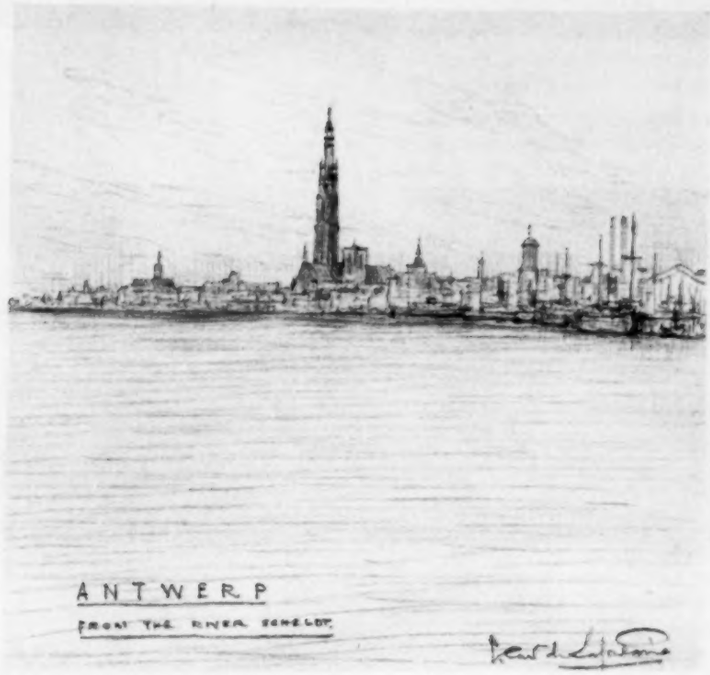


Antwerp from the River Scheldt.

From a Sketch by Lieut.-Col. H. P. Cart de Lafontaine, A.R.I.B.A.

MEETINGS

Friday, *May* 30.

International Congress of Building and Public Works.—Banquet. Connaught Rooms, Great Queen-street, W.C.2. 6.30 p.m.

Town Planning Institute. Mr. J. Macaulay on "Town Planning Economics." 6 p.m.

Society for the Protection of Ancient Buildings. Annual General Meeting. At the Institution of Civil Engineers, Great George-street, Westminster, S.W.1. 4.30 p.m.

Saturday, *May* 31.

South-Eastern Society of Architects. Visit to Hampton Court and Richmond. 10 a.m.

Monday-Friday, *June* 2-6.

Institution of Electrical Engineers. Conference. At Dublin.

Tuesday, *June* 3.

Illuminating Engineering Society. Annual Meeting.

Saturday, *June* 7.

Institution of Municipal and County Engineers. Southern District Meeting. At the Town Hall, Cheltenham. 10.30 a.m.

Thursday, *June* 12.

Institution of Municipal and County Engineers. Meeting of the Northern Irish District. At Belfast. 3 p.m.

Thursday-Saturday, *June* 12-14.

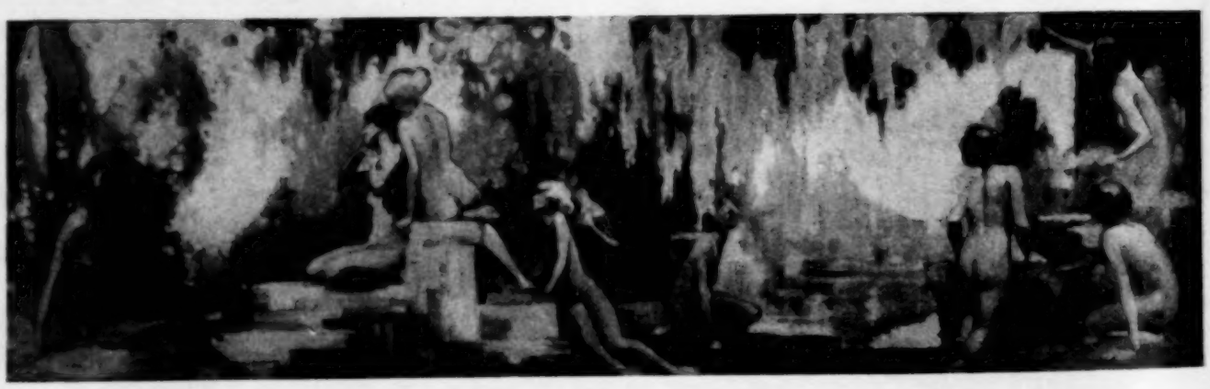
Institution of Municipal and County Engineers. Annual Scottish District Meeting. At Inverness.

Wednesday-Saturday, *June* 18-21.

Royal Institute of British Architects. Annual Conference. At Norwich.

Saturday-Saturday, *June* 21-28.

Royal Sanitary Institute. Annual Congress. At Margate.



Frieze Decorations Designed by Mr. C. Rebel Stanton.

[These illustrations, and the one on p. 1033, are from a recent exhibition at Mr. Rebel Stanton's studio, No. 295, Euston-road, N.W.1 Though the reproductions give no idea of the charming colour effects of the originals, they show the artist's feeling for decorative composition and architectonic design.]

CONTROL OF DESIGN

RECENT notes in the daily Press, reporting a system of official control in architectural design and colour to be adopted in Turkey, are likely to be seized upon by people of widely differing opinions, as the text for the particular sermon each individual wishes to inflict upon the ignorant public. On the one side, we shall doubtless find the project treated with derision. We shall be warned against copying the hasty methods of a country which we have often assumed to be the least civilised in Europe. The same school will perhaps have more to say about the bureaucracy and its dead hand upon artistic impulse; with perhaps an addenda reminding us that this is a free country, that will brook no interference with its natural destiny. On the other hand will be a number of people, who will see in this official control the inspired solution to all our problems of ugly building and despoiled countryside.

But both these schools of limited thought will, we believe, have missed the real point. It is rarely that we can swallow whole a panacea for all our ills, and this is not the occasion for it. But there are points about this interesting event which may suggest a way by which we may find an exit from the impossible system of muddle into which the post-war period of building activity has led us.

Those who talk incessantly about the civic freedom of this country assume a grave responsibility, because there is but a narrow dividing line between freedom and license. Complete freedom is only possible, if at all, in a perfect society of perfect individuals, which even our own nation can hardly profess to be. Laws and rules are not made to create morals, but to ensure that the unmoral shall not affront the accepted principles of the majority. What is known as the "lawless" country may be the one where there is a superfluity of laws; but it does not follow that where there are no laws to break, there morality reigns unbroken. What every civilisation has sought is the happy mean between an unspoken standard of morality and the written law.

In matters of art, the written law is perhaps the most difficult to apply, especially in this age, which seems so uncertain of the standards by which matters of art are to be fairly judged. Men of widely differing opinion and outlook command attention, if only by their sincerity, and any attempt to compile a written standard by which good and bad taste and design might be detected would be a task which only the omniscient would be competent to attempt.

On the other hand there are activities going on around us which every man of higher instinct condemns, and in such unanimity there seems some hope of finding a means whereby the will of the majority shall prevail. For it must be true that the majority of our citizens, whether or not they may laugh at the much over-worked name of art, do care that their country shall remain beautiful, and the works of man be made decent and orderly. How to reconcile the one with the other is the problem which we have to face, and to solve.

We shall be told that this is not the first tasteless age which this country has weathered, and there will be some who will attempt to compare the Victorian age with the present, much to the disadvantage of the former. But the comparison is a somewhat fruitless one, because the two have so little in common, while this age lacks the order and consistency of the other. The Victorian was at least well drilled in his stodginess, and we can deliver a fairly clear-cut judgment upon his art. But the present age is full of confusion, and if we cannot carry ourselves with dignity naturally, we need to be drilled. How this drilling is to be done is a vexed question, and we sail perilously between the Scylla of deadening bureaucracy and the Charybdis of the crank's dogma. We do not wish to see an Act of Parliament ruling the style of modern architecture either upon the lines of Wren or of Corbusier. What we do want to see is some recognition in law that the evils from which modern architecture suffers are primarily matters of disorder and untidiness.

The Turkish proposal appears on the surface to have recognised this fact, and if they can drill bad taste into a pattern of decency, the law-makers will have registered a triumph.

Good taste can often be left to its own devices, as witness the haphazard lay-out of the farmyard, in which all delight. But bad taste may become a disease, as witness the bungaloid outbreak of the countryside, which all view with disgust, and to which many of the disgusted contribute, either actively, or by silent acquiescence. Indecision may be pardoned when it springs from a fear that by drilling those we cannot trust for their decency we may stifle the charm which more trusted times have bequeathed to us. But our indecision is unpardonable so far as it springs from a reluctance to act where action is difficult or unpleasant, and we fear that the latter consideration inspires most of the immobility which reigns in our midst.

For the former, and there are many sincere doubters, we would suggest that inspired talent is irrepressible. One cannot destroy art by law, any more than one can create it by the same means; and restriction often becomes the material for the creative sense. We can cite the zoning laws in America as an instance where an artificial restriction has been the means of creating a special character to the areas affected; and there are other equally patent examples. What we must recognise is that because the well-mannered may dislike to be taught deportment is no reason why indecency should be permitted elsewhere. Rather than warn our friends in Turkey against the danger of going too far, we are inclined to demand a reason why our own authorities have not gone far enough.

Among other things we might well ask why it is that fuller advantage has not been taken by local authorities of the services of Voluntary Panels of architects, which have been freely offered in response to the wishes of the Ministry of Health. We know of a few cases (but far too few) where a Panel has functioned, and with success. Such a case is that of the by-pass road at Eastbourne, where the merits and possibilities of alternative routes were considered by a Panel of Architects. The findings of the Panel were acted upon with a result that the charming village of Willingdon preserves its rural character, and an apparently insuperable obstacle in the alternative route has been overcome.

But in innumerable other cases local authorities continue to act in matters essentially architectural or concerned in Town Planning with no other trained advice than that which their own surveyors can offer them. So is a great bulk of willing talent denied to the public at a time when every inspired brain should be mobilised in the service of civic order

It is this sort of thing which prompts us to suggest that it is time for the law-makers to review the position. We do not ask for penal laws against bad architecture, but we do ask—in fact as citizens we are entitled to demand—that civic disorder should be prevented by the law of the land.

NOTES

The Two Voices.

As a coalowner, Lord Londonderry in the House of Lords on April 29th this year, criticised the Coal Mines Bill, and he said "the Bill appeared to contravene many of the basic economic principles on which they had been brought up. It was a further contribution to the policy of bureaucratic control, with the corresponding loss of initiative, and to the sterilisation of the spirit of enterprise." As a First Commissioner of Works, Lord Londonderry, at the Architecture Club dinner on May 1st last year, said his words would not seem to hold much hope for the private architect to be commissioned to erect Government buildings; which, if it means anything, is "a further contribution to the policy of bureaucratic control, with the corresponding loss of initiative, and to the sterilisation of the spirit of enterprise." Here are two voices. The noble Lord sees clearly enough the evils of bureaucratic control as regards the coal mines, but has nothing but praise for the bureaucratic control in the Office of Works, which cannot be good for architectural practice.

The Activities of the Office of Works.

We consider we have a right to ask whether the activities of His Majesty's Office of Works should go beyond the care of palaces and public buildings, and also include the design of the many new public buildings which are needed by the Government. It may be perfectly true that many able men have been employed by the Office of Works, partly as the result of the depression in architectural practice, but are we to look upon the Office of Works as a sort of school for the education of architects and a sort of home for those who, owing to the competition of officials, are unable to carry on a private architectural practice? Is it a right policy to encourage a school of architectural practice within the control of the Office of Works to the detriment of private architectural practice? We certainly must all hope for the best evolution of architectural design and practice, but surely the growth and development of an Office of Works is not the ideal way of obtaining it, for Lord Londonderry says, "a further contribution to the policy of bureaucratic control means a corresponding loss of initiative and the sterilisation of the spirit of enterprise."

The Charing Cross Question.

"It would be more in accordance with the dignity of the House and its Private Bill Committee—and incidentally of the Ministry of Transport and the L.C.C.—to refer the whole question *de novo* to some outside body for further and wider investigation." Thus said *The Times* on Saturday last, and surely there will be few to question the wisdom of its utterance on the Charing Cross discussion. The wisdom of our day will be for ever discounted unless full and fair consideration is given to this question. Apart from whether we can afford such a costly scheme we do insist that we can and must afford to adopt a scheme which will be for the well-being and dignity of London. Whether we can do no more than give it a right beginning, London is confronted with a problem which can be competently dealt with by able men of our time. The official scheme has been condemned by such a body of expert opinion that none responsible for the future of London can overlook, and it is surely time that this opinion and judgment should be brought forward in a united and formal protest.

Excavations at Ur.

Mr. Leonard Woolley's lecture at the R.I.B.A. on Monday on the excavation work which has been going on for some seasons now at the ancient city of Ur, was made exceptionally interesting by the evidence he submitted that the uses of the arch and the dome based on pendentives were known and understood in 2500 B.C. The lecturer drew attention to the high standard of building craftsmanship which had been reached at that time. Cement bricks were known about 6000 B.C., while one of the most interesting slides showed a temple, dating from about 2300 B.C., whose external walls provided a perfect and intentional example of entasis.

Taller Business Premises.

The news that the Manchester City Council has approved, by a large majority, a recommendation to consider favourably plans for new buildings which are not higher than 120 feet may perhaps cause a certain envy amongst London store proprietors. The present regulations in London do not allow the utilisation of floors above 80 feet in buildings used for trade (*i.e.*, stores or warehouses) except under conditions which destroy the usefulness of the building. Peculiar results of this ruling are not uncommon. We have before referred to one particular store building in Piccadilly which was compelled by Crown regulations to build to a height of 100 feet, and is not permitted by L.C.C. regulations to use any portion above 80 ft. There is, we believe,

Wickham Market, Suffolk.

From a Sketch by Mr. E. Starling.

Decorative Study.

By Mr. C. Rebel Stanton.

a story lying there idle to this day. Such regulations are a great hindrance to building development, and there are, very possibly, several stores in Oxford-street that would like to rebuild but cannot afford to do so if the full utilisation of their site is to be restricted. From its new ruling, it would seem that Manchester has satisfied itself that modern methods of fireproof construction are practical and sound enough to allow business premises to be built up to 20 feet more than London allows. While most architects have no desire to increase the height of buildings, they do consider that it is time that the London Building Acts and Regulations were revised to take every advantage of the progression which recent years have seen in modern building methods and practice.

Church Design. The great development of housing schemes has directed serious thought to the provision of adequate church accommodation, and Mr. Burke Downing has dealt with this in a pamphlet just issued. In this he makes a strong plea for the maintenance of a proper standard of design. The following is a quotation from his excellent pamphlet:—"I suppose that we may say that the pursuit of the ideals by which we should be inspired in church building ought to result in a building of a dignified and impressive exterior and a devotional interior. Difficult as it might be to describe in what way a devotional character may be impressed upon brick and stone, everyone is conscious of its existence when it is met with and of its absence in other places, where it is to seek. England is so rich in churches bequeathed to us by our ancestors, in which these qualities are conspicuously present, that the secret of producing them need not elude us. It is not found in slavish reproduction of some ancient structure, a reproduction which might be incongruous with the circumstances of the present time and the situation and surroundings of the building, but by penetrating the principles upon which these qualities are founded, principles which are not inherent in the work of any one style or period only. Among these principles are certainly to be included a plain sincerity or simplicity, harmony, spaciousness and good proportion. For dignity there is the need of adequate height and ample floor space—the floor is not merely needed for accommodating pews or chairs. Richness of ornament may be very proper in suitable conditions, but it is not essential: the dignity and devotional character of the building should be independent of any such aid."

The Surveyors' Institution. The afternoon reception of the Surveyors' Institution at the Zoological Gardens, Regent's Park, N.W., on Tuesday, was favoured by unexpectedly fine weather, which enabled a large and distinguished party of members, their ladies and friends, to enjoy a very pleasant afternoon. Ample refreshments were provided as well as an excellent programme of music, while the various well-known attractions at the Gardens provided additional entertainment for the visitors. The members were received by the President, Mr. Ernest H. Leeder, and the music was provided by the Band of His Majesty's 17th and 21st Lancers. The new Reptile House and the other recent work at the Zoo have added to the attractiveness as well as the usefulness of this popular resort.

Surveyors and Registration. The sixty-second annual general meeting of the Surveyors' Institution was held on Monday, as reported on p. 1051. The report stated that "of the many questions which claimed the attention of the council during the year, perhaps the most important to be decided was whether the policy of statutory registration should again be proceeded with and a Bill promoted. It is now a matter of history that the Institution, the Auctioneers' and Estate Agents' Institute, and the Land Agents' Society co-operated in 1923 to introduce a Bill which, although read a first time, encountered a considerable amount of opposition and did not make further progress. The promoting societies, therefore, decided to defer its reintroduction for the time being. A recent movement in favour of registration, on lines somewhat opposed to those supported by the promoting societies, has led to a review of the whole policy, with the result that the councils of the three societies have arrived at the conclusion that the advantages which might attend registration are, under present conditions, insufficient to counter-balance the loss of those attaching to the existing system."

Killarney. The announcement in the Press that the Kenmare estate, covering some thousands of acres at Killarney, is for sale has led Mr. Crowley, one of the deputies in the Dail, to ask the Minister of Finance whether he could make arrangement out of public moneys that the property bordering on the lakes should be preserved for the nation. No definite promise was made. Killarney should come within the scope of strict town planning supervision, and the Government would be showing a wide vision if it purchased the land surrounding the lakes as a national park. Its magnetic power over tourists would be greatly increased and the Free State would earn a rich harvest.

Victoria and Albert Museum. The review of the principal acquisitions of the Victoria and Albert Museum during 1929 helps to a realisation of the wonderful value of our treasure house at Kensington. The illustrations and descriptions deal with architecture and sculpture, ceramics, engravings, paintings, metalwork, woodwork, etc. Pottery and metalwork are especially interesting, and the fine Empire centrepiece for a dining-table which we illustrate marks a high standard of design. This is in ormolu by a French craftsman of the last century.

From Victoria and Albert Museum.

Ormolu Centrepiece.

By Thomire.

GENERAL NEWS

Professional Announcement.

We learn that Messrs. Ross & Buchanan, chartered architects, have removed to 189, Pitt-street Glasgow, C.2.

New President, Surveyors' Institution.

Mr. Ernest H. Leeder has been elected President of the Surveyors' Institution, in succession to Mr. C. H. Bedells. Mr. Leeder is in general practice as a surveyor and auctioneer in Swansea.

Honour for Mr. H. C. Bradshaw.

The Council and Senate of the University of Liverpool have agreed that the honorary degree of Master of Architecture be conferred on Mr. H. Chalton Bradshaw, secretary to the Royal Fine Art Commission.

The Tower of London.

The Engineering Department of the National Physical Laboratory, in the annual report for 1929, commenting on the stability of the buildings of the Tower of London, state that the periodic measurements of the movement of the quay wall and the masonry of the Salt Tower, relative to the blue clay formation underlying the gravel on which the buildings rest, show that the total movement in the ten years 1920-1930 has been approximately two millimetres. The present rate of movement is half a millimetre a year.

Architectural Design in Concrete.

The Liverpool Architectural Society announce that the H. W. Williams scholarship for the promotion of architectural design in concrete, value £50, for one year, will be awarded for the best design submitted for a lay-out of station and surrounding site proposed for a new and fashionable seaside resort on the south-west coast and designs for the buildings thereof. The latter will be erected in ferro-concrete. Details may be obtained from the secretaries, Messrs. Hodgson, Morris and Co., chartered accountants, 41, North John-street, Liverpool. The closing date is July 31.

R.I.B.A. Prizes and Studentships.

Attention is called to the fact that the Council of the R.I.B.A. have decided that after January 31, 1931, in addition to the existing qualifications, competitors for the Tite Prize must at least be registered Probationers R.I.B.A., while competitors for the following prizes must at least be elected Students R.I.B.A. :—The Soane Medallion, the Victory Scholarship, the Owen Jones Studentship, the Silver Medal for Essays, the Henry Saxon Snell Prize, the Alfred Bossom Travelling Studentship, the Grissell Prize, the Neale Bursary, the Hunt Bursary, and the Godwin and Wimperis Bursary.

Reopening of St. Paul's Cathedral.

The Council of the Royal Institute of British Architects has arranged to celebrate the reopening of St. Paul's Cathedral on June 25, after many years' reconstruction work, by a special general meeting, on Monday, June 23 next, at 8.30 p.m., at which a lecture dealing with the restoration of the Cathedral will be delivered by Captain C. Stanley Peach and Mr. W. G. Allen. The lecture will be illustrated by slides, and by an exhibition of models, masonry specimens, drawings, and photographs, which will remain open till June 28, between the hours of 10 a.m. and 8 p.m. (Saturday 5 p.m.).

The Institution of Welding Engineers.

The Institution of Welding Engineers offers a prize of £10 10s., and the gold medal of the Institution, for the best original paper offered by a bona-fide operative welder, either oxy-acetylene or electric process. The competition is open to bona-fide operative welders, whether members of the Institution or not. The Institution will also have the pleasure of giving the prize-winner a permanent record of his success and will arrange for the prize-winning paper to be read before a meeting of the members of the Institution of Welding Engineers, either by the author or by proxy, as may be convenient. The subject of the paper to be "Welding practices and methods, based on my own experiences." Full details may be obtained from the Secretary of the Institution of Welding Engineers, 30, Red Lion-square, London, W.C.1. All entries must be received at the office of the Institution not later than August 31. The competition will be judged by Major James Caldwell, M.Inst. C.E., M.I.E.E. (nominated by the President of the Institution of Electrical Engineers), and Mr. Loughnan St. L. Pendred, President of the Institution of Mechanical Engineers.

EXHIBITION NOTE

Mr. Hanslip Fletcher is showing, at Foyle's Art Gallery, a collection of over 70 of his drawings of old London in pen and ink and colour, which form a pleasing record of old buildings now fast disappearing. To many, some of these quaint old-world buildings must be unknown, and Mr. Fletcher's drawings are an inducement to those who have taste and love for old London to visit the exhibition.

Of the larger drawings on view, No. 31, "Drawing-room, Devonshire House" (now demolished), records the character and dignity of this fine room, where so many persons of distinction from time to time must have gathered. No. 41, "The Athenæum" : here again the dignity of this well-known club is shown. No. 56, "A Soho-square Interior," is a room of much architectural character, with good proportion and well-placed carving. No. 13, "Romeland, Waltham Abbey," shows an old market square with tethered cattle, reminding one of the work of Rowlandson. From the lesser drawings, No. 15, "Williamson's Hotel, Bowlane," is a delightful corner impressed on one's mind by Mr. Fletcher's sketch. No. 63 "Westminster Abbey," in colours : here the artist suggests the glamour and solemnity of the Abbey interior. Other excellent drawings are : No. 29, "Court House, Bank of England"; No. 17, "Manette-street, Soho"; No. 6, "St. Andrew's, Holborn." The exhibition remains open until June 18.

COMPETITION NEWS

Blackpool Town Hall Site.

It was decided recently to invite suggestions from experts as to the best lay-out of the area which at present comprises the Town Hall, market shops, and shops fronting Church-street, Blackpool, and the Council has now decided to bring the matter before a special meeting of the Estates and Housing Committee.

In a letter to the *Blackpool Gazette and Herald*, Mr. G. H. Willoughby writes as follows :—"I learn from a recent paragraph in your columns that the Corporation proposes shortly issuing conditions of competition for architects to submit their designs for a new Town Hall. Before doing so for a building of this magnitude, very respectfully may I suggest there should be some reasonable agreement among the promoters that the work ultimately will be proceeded with? Twenty years ago a competition on similar lines was promoted by the Manchester Corporation for a Library and Art Gallery to be erected on the Piccadilly site. Subsequently the project was shelved. The 220-odd designs that were then obtained involved the profession in a fruitless outlay of at least £20,000!"

Proposed Fire Station, Norwich.

The Municipal Offices Committee of the Norwich City Council has recommended that (a) Mr. Robert Atkinson, F.R.I.B.A., of 36, Bedford-square, W.C.1, be appointed to act as assessor for any architectural competition arranged in respect of a new fire station; (b) the Municipal Offices Committee be authorised, in conjunction with the Watch Committee and in consultation with the assessor, to draw up the terms and conditions of an architectural competition in respect of a new fire station at Bethel-street, and to make a report to the Council thereon before asking for competitive plans. The recommendation has been agreed to.

Proposed Minister's House : Chulmleigh, Devon.

The Competitions Committee of the R.I.B.A. desire to call the attention of members to the fact that the conditions of the above competition are not in accordance with the regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime, members should not take part in the competition.

COMPETITIONS OPEN.

	Particulars published in "Builder."	Sending in-date.
New Public Library and Museum, for Chelmsford T.C. Mr. H. V. Lanchester, F.R.I.B.A., assessor. Conditions from G. E. Barford, Town Clerk, Clerk's Office. Dep. £1 1s.	Feb. 21	June 14
Public Baths, for Corporation of Kingston-upon-Thames. Premiums of £300, £200, £100 and £50. Mr. J. Ernest Franck, F.R.I.B.A., assessor. Conditions from Mr. A. W. Forsdike, Town Clerk's Office, Kingston-upon-Thames. Dep. £1 1s.	Mar. 14	June 14
New Masonic Hall, Enniskillen, for Enniskillen Masonic Body. Open to architects practising in Ireland only. Premium, £50. Mr. John Seeds, F.R.I.B.A., assessor. Conditions from Mr. R. W. Smith, Hon. Sec., Building Committee, Masonic Hall. Dep. £1 1s.	April 4	—
Municipal Buildings in Chapel-road, for the Worthing T.C. Premiums of £360, £250, £150 and £50. Mr. H. V. Ashley, F.R.I.B.A., assessor. Conditions from Mr. J. Kennedy Allerton, Town Clerk. Dep. £1 1s.	April 4	July 5
New Town Hall and Municipal Buildings, for the Luton T.C. Premiums of £500, £300, £200 and £100. Sir Brumwell Thomas, F.R.I.B.A., assessor. Conditions from Mr. W. Smith, Town Clerk, 2, Upper George-street. Dep. £2 2s.	Mar. 14	July 31
Two Council schools at Dudley, for Local Education Authority. (1) At Priory Estate, for 400 children; (2) at Brewery Fields Estate, for 320. Open to architects with offices within 15 miles' radius of Dudley. For each: Mr. H. T. Buckland, F.R.I.B.A., assessor, and £150, £100 and £50 premiums. Conditions from Mr. J. Whalley, Education Offices. Dep. £1 each	April 28	July 31
Lay-out of Sea-front, Bangor (County Down, Ireland), for B.C. Premiums £150 and £50. Prof. L. P. Abercrombie, F.R.I.B.A., assessor	May 9	Sept. 1
Improvement Scheme, English-street, Carlisle, for T.C. Premiums of £300, £200 and £100. Mr. Francis Jones, F.R.I.B.A., assessor. Dep. £1 1s. Conditions from Mr. P. Dalton, City Engineer, 18, Fisher-street, Carlisle	May 9 & 16	—
Library at West Humberstone, for Leicester Corporation. Premiums of £75, £50 and £25. Mr. Hugh Gold, F.R.I.B.A., assessor	May 16	—
Site Development, Liverpool, for General Building Syndicate, Ltd. Premiums of £250, £100 and £50. Conditions from Secretary, 36, St. Martin's-lane, W.C.2	May 16	—

EXCAVATIONS AT UR.

The President, Sir Banister Fletcher, occupied the chair at the Institute premises on Monday night, when Mr. C. Leonard Woolley, M.A., Hon. A.R.I.B.A., delivered a lecture on recent excavations at Ur.

The lecturer said that the main object of all their work had been, of course, history. In recent seasons they had been amazingly lucky in finding in the Royal tombs of the pre-historic kings, treasures of gold and silver and stone, unequalled for their age and artistic merit in any other country. He did not say that at a later period one did not find finer things, such as in Egypt; but taking into consideration date and quality, Ur was given extraordinary pre-eminence by its finds. But all such things were comparatively valueless unless taken in their true perspective and historical sequence where dates were lacking.

The lecturer, in showing a section of the pit dug by the expedition last winter, said that their object was to go back to the beginnings at Ur of the Chaldees. They selected the city site, where denudation by the weather had had great effect. All the buildings at that site had been swept away by wind and rain, and the ground level was that of 3,200 B.C. From that level they dug down 61 feet. There had not been a place of human habitation below that level. At that level there had been a small island rising out of the primitive marshes which had been Mesopotamia, and on which there was a settlement. The formation of the organic soil by decayed reeds gradually raised the level until it rose above the level of the sea, and land was formed, and immediately afterwards men moved their settlements down to the new soil. The next deposit was composed of household refuse, broken pottery, etc. At one end of the pit there were distinguished in the deposit, which reached to the depth of 6 feet, three floor levels of beaten clay. There they found a more interesting discovery, namely, the clay plaster of a reed hut which had been accidentally burned. Even from the fragments they could distinguish the form of construction, and it was that in use at the present day, by which reed stumps were bound together and planted upright in the soil, and between them were stretched mats—such as found amongst present-day Arabs. Then, as now, mud was plastered over the reed structure. But the primitive builder of Ur was careful to preserve the constructional features of his house as could be seen from the fascines set out in relief and forming half-columns against the hut surface and the wall. There we saw some feeling for architecture, at a date which was literally antediluvian. He said that, remarked the lecturer, for the reason that above that collection of household debris was a stratum, 11 ft. thick, of clean sand, water-borne, and deposited from the actual Flood, which incident, of course, was at the bottom of the story of Noah.

Dug down into that deposit were a certain number of graves of people who lived immediately after the Flood. The lecturer then showed examples of bricks, flat-topped and moulded—graves, pottery and ware and modelled figures. He showed also the earliest piece of stone sculpture they had found—a stylised representation of a wild boar. It showed, he said, that art was no new thing for these immediate post-Flood people and showed a very high level of culture for the time. He showed, also, examples of written documents found in the big stratum, 3,750 B.C. They were not, he said, the earliest documents known in Mesopotamia, but they were very early. The writing was semi-pictorial. There were also remarkable designs of the linear type, very elaborate and unlike anything else we knew in the later art of Mesopotamia, but closely connected with the early seals and seal impressions from Persepolis, showing that there were Persian connections influencing the civilisation of the valley. From a seal found, which could definitely be dated at 3,100 B.C., it could be confirmed that the Royal cemetery dates between 2,500 and 3,500 B.C.

It might be asked, said the lecturer, "what had all this to do with the subject of architecture?" It was necessary to take it in perspective, and to date the cemetery in which architectural discoveries of great importance had been made. The lecturer showed an early grave, about 3,400 B.C., or thereabouts. It was built entirely of stone, of a rough quarry rubble, and was pure corbel-vaulted in rubble. One might expect that in many countries and at many periods. In another grave, probably of rather later date, there was a change. There were three chambers, all built of stone. The roof was half-way between corbelling and vaulting, and the stones overlapped, but, as they rose towards the top, they tilted forward and there was, in the centre, a key-stone rather than a cap. Clearly, progress was being made. The lecturer showed another Royal tomb close by, with a roof of burnt brick. There was a true arch. The bricks were not moulded and the effect was given by radial mortar lines, but the top of the tomb was roofed in with a series of main arches. But that was not all. The chamber, as built in stone, was square, a rough pendentive turned that into a curve, and the roof had a half-dome. That might be 3,300 B.C. or thereabouts. As confirmation, said the lecturer, he had shown a further tomb where a stone dome, built with pendentives, was found absolutely intact. An interesting feature was that there were holes in the masonry for timber. The builders, as they brought their roof in towards the centre, got frightened; the building of a dome must have been new to them. So they laid stout timbers across, and put over them a mixture of mud and light straw, and got in that way the centring for the stone work, which stood well at the present day. As to the walls of these tombs, a pit was dug to take the building, and the stones, being entirely rough, were built round a caisson. They arranged the stones, poured in mud and water, then took the planks away. So a concrete building was familiar to the builders of Ur in the second millennium before Christ. It was surprising that these methods of roofing were known so early.

The lecturer then showed a temple laid by Nebuchadnezzar, and then a temple which they had, he said, discovered in their last week. In that temple, what he had at first taken to be an altar was a lofty pillar of brickwork intended to support the roof. That was of further interest as throwing light on the use of the column in Mesopotamian building, which, as was generally known, was held by experts to have been unused by Mesopotamian builders until the Greek period. The lecturer also showed the photograph of a back wall of a reconstructed Ur building, which showed clearly the pronounced columnar curve, showing that builders of that age were aware of the value of entasis.

Professor J. W. Mackail, in opening the discussion which followed the paper, said that owing to the lecturer's extreme lucidity it was possible for the non-expert to get some grasp of a civilisation which had existed from 4000 B.C. to the present day. Too often in reading the historical aspect of discoveries, we were apt to forget what was the life of the people of those days, but we were now beginning to find out something about that side of things, thanks to Mr. Woolley and others. Of the various things the lecturer had shown, he, personally, had been most interested in the Persian clay pictorial writings. It showed the whole motif and character of the beginning of the Persian arts. Another interesting fact was regarding the discovery of the antiquity of arches, which, he supposed, was the greatest single discovery ever made in archæology. What was most extraordinary was the amazing cleverness of these people and the way in which their cleverness stopped short. These discoveries, it was now clear, had been within the reach of the Greeks, and there was no need for Alexander to have conquered the Near East for its culture to spread.

Mr. Raymond Unwin also spoke, and

Mr. A. S. Whitburn, A.R.I.B.A. (architect under Mr. Woolley to the party), said that he had joined the expedition from America, and thus had gone from what was the newest city in the world to what was probably the oldest. Oddly enough, it was not so very different, because the modern tendency was to use brick with recessed ornament, and the first temple he surveyed at Ur was of the same order. He could not close without paying tribute to Mr. Woolley's energetic work and to the inspiring quality of his leadership, which was sufficient to carry them through any crisis or difficulty.

Messrs. E. Stanley Hall, H. M. Fletcher and Sir John Sulman having spoken,

The President said that Mr. Woolley had shown that the civilisation in Iraq was at least as old as that of Egypt. He, personally, had been very interested in Mr. Woolley's remarks about the corbelled arches, and if Mr. Woolley could substantiate the dates, as he appeared to be able to do, it was very valuable. Another most interesting thing that had been shown was the dome built on pendentives, over a square plan, 2,500 years before the time of the Byzantines—who had been supposed to be the originators.

Mr. Woolley then briefly replied, and the meeting adjourned.

International Congress of Architects in Budapest.

The 12th International Congress of Architects will take place in the capital of Hungary, Budapest, between September 7-14. Both the city of Budapest and official Hungary have prepared for the reception of prominent foreign architects who have expressed their intention to attend the Congress. Distinctions and prizes have been established for the exhibitors at the International Exposition of architectural designs, organised in connection with the Congress. So far, Austria, Belgium, the United States of America, Denmark, Norway, Sweden, Finland, Germany, Holland, Great Britain, Greece, Italy, France, Spain, Bulgaria, Czechoslovakia, Portugal, Jugoslavia, Argentina, Mexico, Egypt, Rumania and Poland have announced their participation at the Exhibition, and further entries are in view. The participation of the Hungarian architects will be *hors concours*, and, according to the decision of the organising committee of the Congress, the designs submitted by Hungarian architects will receive no prizes. Advice has been received by the congress bureau that the Royal Institute of British Architects has officially delegated three of its members to represent the Institute on the Budapest Congress.

THE ARCHITECTURE CLUB

DINNER TO DR. MENDELSOHN.

A DINNER in honour of Dr. Erich Mendelsohn was given by the Architecture Club on May 22, when Mr. J. C. Squire, *vice* the President, Mr. Robert Holland-Martin, who is ill in bed, occupied the chair.

Amongst those present were:—Lord Meston, Sir Max Bonn, Sir Banister Fletcher, Sir George Humphreys, Sir Cecil Levita, Herr A. H. von Scherpenberg, Sir E. Owen Williams, Professor C. H. Reilly, Messrs. Gilbert Bayes, Darcy Braddell, L. H. Bucknell, E. G. Culpin, R. A. Duncan, J. Murray Easton, Joseph Emberton, G. Topham Forrest, H. Austen Hall, P. Morley Horder, C. H. James, Edward Maufe, H. P. G. Maule, Oswald Milne, F. Winton Newman, G. L. Pepler, A. R. Powys, Stanley C. Ramsey, Austin Reed, Howard Robertson, Harold Stabler, F. E. Towndrow, Clough Williams-Ellis, G. Grey Wornum, F. R. Yerbury and the Secretary, J. H. Elder-Duncan.

The loyal toast having been honoured,

The Chairman, in welcoming Dr. Mendelsohn, referred to a letter which he had received from Mr. Holland-Martin, the President, who wrote regretting that continued illness prevented his presence at the dinner. The letter continued:—"I am particularly sorry not to be present to-morrow to welcome our distinguished guest, Dr. Mendelsohn, whose sense of the true values of proportion and mass have won him fame not only in his own homeland, but throughout the world of art, and especially amongst those who believe that all great art must be progressive and must adapt itself to its age. To a Mendelssohn the art of music owes one of its deepest debts, and that magician seems to have transmitted to his countryman of that name the power to transmute rhythm and harmony into concrete and steel."

Extending a welcome to Dr. Mendelsohn, the Chairman said that there was a certain affinity between their guest and his namesake, the musical composer. The latter had produced "Songs Without Words": Dr. Erich, on the other hand, had given them windows without walls. That art was very different from that of their Victorian period, when they built factories like Venetian palaces and railway stations like Gothic churches. The speaker admitted, however, that he was one of those old-fashioned people who were content to think that in building stones were necessary, and that there should be just about enough windows to let in a reasonable amount of light. Dr. Mendelsohn's view, he thought, was that so long as a building would stand up, the more light the better.

Sir Banister Fletcher, P.R.I.B.A., said that they were gathered there to welcome a brother architect from another country. Wagner had broken new ground in the musical direction and that was what Dr. Mendelsohn was doing in architecture. He thought, personally, that the new order of things was transitional, though it might go a long way yet. But Dr. Mendelsohn's work possessed grandeur, mainly through its severe simplicity, its breadth of treatment, and its restraint in detail. He was groping about to find some new thing apart from tradition. That was a plucky thing to do, and he was sure that all architects would wish him the best of luck.

Sir Owen Williams, in supporting the previous speaker in the welcome extended to the guest, said that true architecture did not attempt to force on one material the professed form of another. The architecture of concrete was the recognition of architecture in its true function of art—of plying a trade in one material.

Dr. Mendelsohn then spoke. One of the reasons why it was not difficult for him to speak on concrete, whether reinforced or not, was, he said, that he need only give an account of what he had been doing for the last sixteen years, and of what could now be seen everywhere. For our towns were full of examples of buildings in steel and concrete. But, unfortunately, most of these examples had been built by men who did violence to the material, and who put their trust in the slide-rule, that clever instrument which so easily made its users blind, rather than in creative instinct. The pliability of concrete—he might almost say its versatility—which made it so submissive a servant, led many an architect to continue in his old habits with the new material, not only as regarded architectural style, but also in his building technique.

But to build in concrete involved a revolution in building technique. We built frames; that was, we concentrated the load on single points, instead of distributing it over the wall as a whole. We poured in concrete instead of, as formerly, setting the single parts, bricks or stones, on top of each other. We assembled a building like a machine; mechanical accuracy replaced the skill of the craftsman and his individual subtleties. For our buildings we calculated exactly beforehand every detail of the construction, we organised on a large scale instead of being contented with empirical attempts and occasional lucky results. This fundamental alteration in the methods of building was one of the causes of the change in ideas on architectural form. The success of the new material consequently gave the architect entirely new creative possibilities. The second quality of the new materials, steel and concrete (that of being able to live a life of their own, to exist as absolutely independent materials), gave the lie to those architects who saw in them only an additional means of realising dreams born of their excursions into a mummified past. They concealed their framework with hewn stones and Greek columns. They decorated their buildings so that the façades suggested refinement and the Ecole des Beaux Arts. They destroyed the lightness, the static clarity and simplicity of the supporting frame by building Cyclopean walls on the street front. They were ashamed of the naked construction, and covered it with garlands from the Italian palaces. They confused nakedness with lack of clothes; purity with inexperience. Could we really think that the Gothic architect was ashamed of the buttresses in his cathedral? Were not his buttresses obvious structural elements which he desired to keep visible, to make visible? Were structural elements not structural when they were part of a cathedral?

And we, the proud lords of the technical world, were not we strong enough to take our work as seriously as the architects of the Middle Ages took theirs? Had we developed scientific systems, had we obtained control of earth and sea and sky, simply in order to borrow ideas for our houses and our factories from past ages, to adhere slavishly to forms which had become empty formulae for us?

A great joy filled every architect who understood his time. We rejoiced in the new materials because they imposed on us obligations which, if we accepted, set us free for new and original creations. We knew that constructions in steel and reinforced concrete were very difficult to alter. That was why we considered the plan of the building as though it were a living being. We carefully avoided anything in the nature of a schematic design, because each plan had its own life, its own purpose, its own conditions of movement and transport, its own unique form. We reckoned with it and with its form as something determined by its nature—and thus harmonised calculation and form, industrial purpose and architectural form. We settled in advance the sequence of the separate parts of the building, we determined its rhythm, which was of more value to us than any decorative trimmings. We saw in constructing a creative activity, in the creative construction, an architectural work of art. With our girders we spanned the greatest spaces. We lit them by great glass surfaces between the elastic supports. By means of glass we got rid of inert matter and made the building light and transparent. We transferred the principles of bridge construction to building, and, by means of cantilevers, raised certain parts above the earth and caused them to float in the air.

Many buildings were already speaking this language, clear and easily comprehended by those who had ears to hear. The development from the Crystal Palace in 1856, from the Eiffel Tower and the Galeries des Machines in Paris, to the American grain elevators, the turbine rooms of the A.E.G. in Berlin, the Century Hall in Breslau, the Hangar at Orly, and the new buildings in France, Holland, Germany and the whole world, was astonishing and logical, and already sufficiently advanced to stimulate and fill us with enthusiasm.

We could not foretell what effects the light metals would have on the buildings of the future. But we already had a faint idea of the lightness of future constructions, of the elegance of their appearance, and of their harmony with the life that would surround them. Many of the ideas of which he had made a note so long as sixteen years ago could not yet be carried out. But he knew that one day they would be realised.

A new era had begun. We could not turn back. We had overcome the decadence of an uncreative civilisation with its eyes fixed on the past, and we were again approaching a period of creative culture. The task for all of us, was to express our own time, not to try to live in the past. Our task was to be really ourselves, to be the masters of our materials, of our environments and their conditions—to be the masters of our time.

THAMES BRIDGES CONFERENCE.

The following resolution was passed at a meeting of the Conference held on May 20, copies of which have been sent to the Prime Minister and the L.C.C.:—

The Thames Bridges Conference places on record its satisfaction that the Private Bill Committee of the House of Commons, by rejecting the official Charing Cross Bridge scheme, has saved an important part of central London from permanent injury by radically defective planning. The Conference at the same time reiterates its conviction that a road bridge at Charing Cross is urgently required and that immediate steps should be taken by H.M. Government:—

(i) To inquire into the railway position in regard to the development of London, including the relationship between the tubes and the suburban railways;

(ii) To secure by competition (open to architects, engineers and town-planners) a plan, in accordance with the data obtained, for the future development of central London (on both sides of the river) including Charing Cross Bridge and its approaches.

The Conference is further of opinion that in view of the evidence given before the Committee on the subject of Waterloo Bridge the underpinning and reinstatement of that bridge should now be proceeded with.

Relics of Old St. Paul's.

A correspondent of the "Morning Post" writes to point out that in the choir of the Cathedral of St. Bavon, Ghent, there are four massive copper candlesticks, with the arms of England on their bases. These were taken from St. Paul's Cathedral by Cromwell and sold to Ghent. The two tall candlesticks in the existing London Cathedral are copies of them.

NATURE AND MODERN DESIGN

MR. L. SYLVESTER SULLIVAN, F.R.I.B.A., took the chair at a meeting of the Goldsmiths' Company recently, when Dr. R. Y. Gleadowe, Slade Professor of Fine Art, Oxford University, delivered a lecture on "Nature and Modern Design."

The lecturer, in opening his paper, said that he was a great admirer of modern tendencies in architecture, at any rate at their best, but the more he admired the extreme simplicity and boldness, the courage and Puritan virtue, as one might call it, of modern design at its best, particularly in architecture, but in other kinds of decoration too, the more he felt doubtful as to whether such courageous Puritanism in design was enough. We were tending to mechanise life in every direction, and that threat—and he did regard it as something of a threat—of course, was a threat to humanity or humanism. There was, therefore, a certain choice as to whether they should, as craftsmen and designers and artists and those interested in such things, throw the weight of their opinion and working life, in so far as one was a free man, into the furtherance of mechanism as applied to the arts, or, on the other hand, on to the side of humanism. What he was going to suggest was that with all this admirable development in the direction of logical simplicity, purity of expression, of materials and purpose, such Puritanism, such mechanism should be supplemented by our generation consciously by something additional to that Puritan simplicity of structure and purpose and a proper, sane use of materials.

We had got away from style. One might say that we could learn from the styles of the past. At the present moment he was afraid it was true that there was not a style that we all agreed as being good style for our day. If there were, things would be exceedingly simple. They would be as simple as they were for the builders and decorators of Chartres Cathedral or the Parthenon. There was no problem of style at all. One did what one thought best at such times, and all pretty well agreed as to what was best. Now we could not agree, and so we were forced to find out something for ourselves either as individuals or as groups and schools. He hoped that he would live to see the day when there really was such a thing as modern architecture and modern decoration which did not belong to this style or this camp or this country, or even this or that man, but which simply was that of the second half of the twentieth century or the middle of the twentieth century, so that the problem of style was no longer one of free choice.

But we were very far from that day now, and we had to win through consciously by difficult effort to some sense of what style meant to us here and now. And we could only do it in two ways: first, by what might be called individualism, simply by expressing ourselves. The difficulty was, of course, if we simply expressed ourselves, that other people did not very much want to hear us or see us expressing ourselves. It did also matter very much what kind of a self one had to express. If a sculptor, or a craftsman, or a designer was expressing himself—well, as likely as not he would be not a popular figure in the world. It was only in so far as he was the kind of man that would appeal to us personally that his self-expression would appeal to us. Nor had self-expression really got very much to do with art at all, as he (the lecturer) understood it.

The alternative was that we should by hard endeavour, with all the means that there were now at last at our disposal, try and learn anew what really was good form. He would suggest that good form was not of this or that individual; it was not of this or that nation, or of this or that generation. The school of beauty and of craftsmanship, the school of good form (in which in the first instance it seemed to him everybody could, and indeed must, learn how to make a thing well), that was the definition of art, and it was also the definition of craft, because the two were rightly to be regarded as the same thing. The modern artist could learn from Nature always. He could now, for the first time in history, learn from the best of all time, things made by the best men at the best periods when the beauty of form, excellence of form really was understood. Out of that dual study of Nature on the one hand, and of the best of the works of men on the other, in the museums and elsewhere, it might be hoped that if we all put our hearts into it for a generation or two, we should at length again agree as to what was good form. We should agree that it had nothing to do with self-expression—God forbid that it should have anything to do with self at all—that it had nothing to do with this or that fashion, this or that technical trick, this or that rarity or bit of antiquarian lore: that it had something to do with Nature, and with the greatest work of the greatest men, though the greatest men were frequently anonymous. Nobody knew their name, and they would never wish that they should be remembered, as long as their work was there.

But we had got consciously to recover something that was lost, and we had to go, therefore, to Nature on the one hand, and to the works of man on the other. Out of that he hoped, said the lecturer, that something would emerge which would be not the new style, but, should we say, style. If one did not like the term "style," let us say beauty, a word we were all afraid of nowadays, but the sooner we ceased to be afraid of the word "beauty" and of the idea it suggested, the better for all the arts and all the crafts.

CORRESPONDENCE

All Hallows, London Wall.

SIR,—Thanks for Mr. E. Starling's pencil sketch of the outside of All Hallows, London Wall. Will he not give us a sketch or two of the beautiful interior of this church?

ARTHUR KEEN.

Officials and Private Work.

SIR,—I had not intended to enter this discussion again, but as the letters from Mr. MacAlister have been seriously misunderstood, further observations are necessary.

Mr. Davidson has concluded that the R.I.B.A. Council is committed to a policy which involves disciplinary measures against all whole-time officials who take up private work. Possibly others have drawn a similar conclusion, and it would be as well for all to understand that this is not the case. For the Council of the Institute to express the view (as it did some years ago) that such a practice was undesirable, is one thing. To attempt to enforce that view as a law and to inflict punishment on those members who do not observe it is a very different matter. The latter course has not even been considered by the Council of the R.I.B.A., much less approved by that body.

Some of your correspondents have made vague references to the way this matter is dealt with in other professions. I have some reliable information in this direction and can say that, practically speaking, the subject is ignored in other professions. I invite your correspondents, who are asking for drastic action in this matter, to quote instances of such action on this subject in any profession in this country. When they realise the facts they may also realise that they are asking for action of an extreme kind, that has neither been taken nor contemplated in other professions. The legality of such a proceeding is so doubtful that under this head alone it is unlikely to materialise. There is the further point that such action would break up the R.I.B.A., with disastrous effect upon Registration, new premises, and various other objectives towards which we have worked for some years, and when all this destructive work had been concluded the practice complained of would be unaffected. In these circumstances, I can promise that, if necessary, all possible influence will be exerted to prevent the adoption of such a dangerous suggestion.

What we need most of all is unity and co-operation within the profession. Obviously a house that is divided must fall to pieces. It is in order to obtain greater unity and better understanding of these matters that the R.I.B.A. Salaried Members Committee has been formed, and the R.I.B.A. and A.A.S.T.A. are working in conjunction for the betterment of the profession as a whole.

A. SEYMOUR REEVES, L.R.I.B.A.,
Secretary, A.A.S.T.A.

26, Buckingham Gate, S.W.1.

Knapton Church Roof.

SIR,—The death-watch beetle seems to be a bit of a connoisseur. It is tragic reading to find in your issue of May 23 that it has attacked this magnificent early sixteenth-century double-hammer beam roof. The large detail photograph of this roof which appeared in your issue of February 11, 1927, page 235, gives some indication of its glory.

I heard another story of its origin while sketching at Ranworth in 1902, but will not occupy space by relating it. I was told the church records at Ranworth state that it also had a double-hammer beam roof originally, but it was sold.

If my memory serves me right, there is not more than 2 in. of difference between the widths of the naves of Knapton and Ranworth. While at Ranworth I found a fragment of a carved oak hand under the tiles in the chancel. This fragment might have belonged to a carved angel, but my reconstruction of the figure from the scale of the fragment suggested that it might be part of a figure which adorned one of the parclose posts of the rood screen.

One can easily visualise the magnificence of Ranworth if it had originally a coloured roof of the Knapton type over its priceless coloured rood screen. Our ancestors certainly do not seem to have had much knowledge or understanding of the gems which they inherited. It is earnestly hoped that money will soon be forthcoming to preserve this wonderful roof at Knapton.

W. D.

White Portland Cement.

SIR,—May I correct one statement in the excellent article by Mr. A. M. Giles, in your issue of the 23rd instant? He says: "Though we do not find white Portland cement manufactured in this country, it is obtainable in America." Mr. Giles has evidently overlooked the fact that "Snowcrete," the British white Portland cement, has been manufactured in this country for about two years.

T. J. CLARK.

British Portland Cement Association, Ltd.

Mock Auctions Bill.

In the course of a letter to us on this subject, Mr. John Stevenson, General Secretary of the Incorporated Society of Auctioneers and Landed Property Agents, writes:—"On May 6 the Bill promoted by this Society and introduced by Mr. W. J. Womersley, M.P., was thrown out in committee by twelve votes to nine.

"This defeat was not due to opposition either from the public or from the auctioneering profession, rather the contrary. The position apparently is that the Home Office advisers consider the present criminal law sufficient to deal with malpractices. We all agree that 'mock auctions' and 'rigged sales' are of relatively small importance, but stopping these would be a step in the right direction and might reasonably lead to more effective control of bogus, unscrupulous or unqualified practitioners."

ANTWERP INTERNATIONAL EXHIBITION

By H. P. Cart de Lafontaine.

The choice of Antwerp for the Maritime and Colonial International Exhibition, which marks the centenary of Belgium as an independent State, is singularly appropriate. Antwerp is, as everyone knows, a great port, but it is also a most interesting city, both as regards its old buildings and the more recent developments.

The first glimpse when one arrives by sea is a line of grey buildings, seen through an opalescent haze, wherein sky and water seem to meet, while, among the towers, spires, and factory chimneys, the dominating tower of the cathedral rises with a graceful silhouette, clear and straight above the river mist and the picturesque lines of the ships in the foreground.

But here our purpose is not to describe the city, but to give some brief impressions of the exhibition. First, then, one has the impression of architectural diversity; the monumental entrance is a fine architectural conception—a lofty portico, some 60 ft. high, with three great openings, simply treated, with no cornices, columns, or other conventional elements; just a series of flat surfaces, with small panels of ornament in the right place; the crowning feature consists of three octagonal flat domes, decorated externally with alternating ribs and flutes, while over the centre archway a great winged and gilded figure gives the only note of colour in the composition. Internally, a treatment of lighting gives the effect of stalactite vaulting, while beneath each opening is a monumental equestrian figure of the three Belgian kings.

This monumental entrance really is monumental, and an excellent example of the modern spirit, tempered by tradition, but inspired by modern materials and conditions.

Grouped around the *Place du Centenaire* are buildings destined to house the Belgian exhibits in the maritime, agricultural and transport sections, while opposite the main entrance is the *Palais des Fêtes*.

At present none of these buildings is completed; in fact, the only national pavilions open to the public are those of Great Britain, Canada and Norway. Of these, the British pavilion (illustrated in *The Builder*, February 7th) is by far the best; in fact, it is quite surprisingly good. Externally—designed by Sir Edwin Lutyens—it looks solid and British; it also looks effective from many different viewpoints and "masses" well. In fact, it is one of the best architectural compositions in the exhibition, though, perhaps, lacking in that spirit of adventure and intriguing novelty, which should mark an exhibition building. Internally, every detail is satisfactory; the lighting is skilful, the colour scheme good, the "display" and lettering excellent, and the introduction of heraldic devices, diorama "peep shows" and three excellent portraits of the King, Queen and Prince of Wales, show that the psychological side of the display of British maritime skill and activity has not been overlooked.

The main gallery is devoted to shipping, etc., and a large number of those wonderful models of "liners" and commercial shipping fascinates one. There is something about the model of a ship which combines romance and a sense of efficiency; in very truth, it seems the symbol of the character of our race. In other galleries one sees such things as a large-scale model of the Tyne from Scotswood in the sea, lent by the Tyne Improvement Committee, a diorama of "the origin of the British race," presented to our Government by Mr. and Mrs. Makowen, and executed by Mr. T. Investor Lloyd—an exhibit which was deservedly popular—and diorama views of typical scenes in various parts of the British Empire. The section devoted to the Eastern dependencies and Colonies is well arranged with samples of local produce and industries.

The interior of the pavilion was designed by Messrs. Richardson and Gill, FF.R.I.B.A.

The Canadian Pavilion, which stands on the opposite side of the lake, is a contrast. Art has little place here, and the exhibit suffers in consequence, for the collection of samples, displayed without taste, does not tempt the visitor to linger.

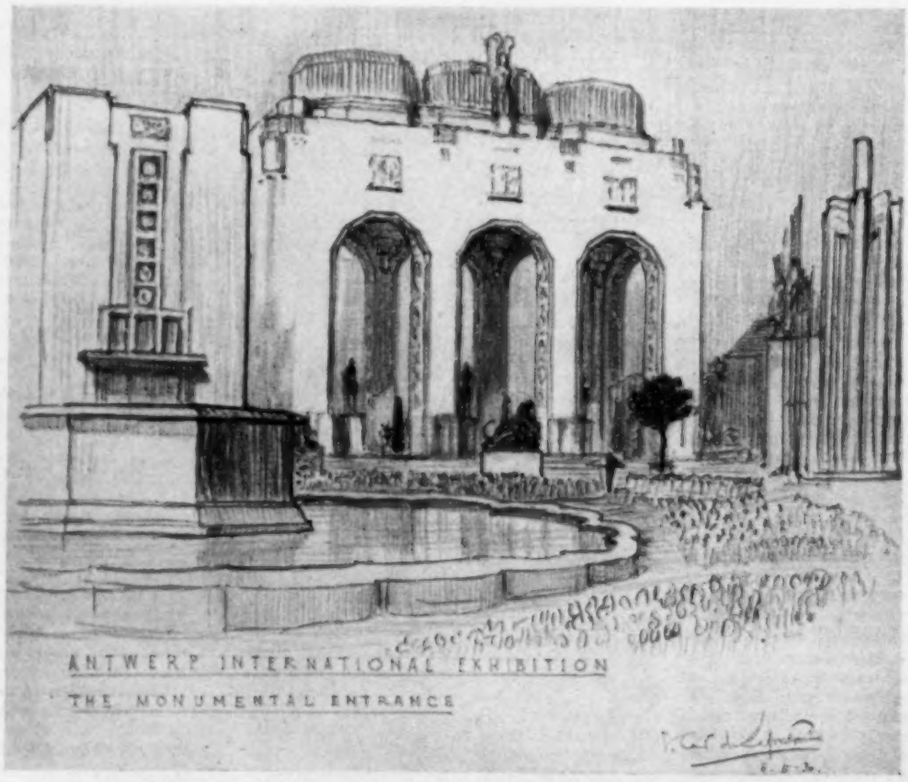
Perhaps the two most striking pavilions are the Dutch building, with long horizontal lines, emphasised by a broad band of wonderful deep blue at the base, formed by a crushed glass aggregate finish to the concrete, and the French pavilion, which has a perfectly plain stucco finish, enriched with a richly decorated panel over the entrance. Immediately in front of the building stands a large and finely conceived figure in gilded bronze, symbolical of the French Republic.

Another striking pavilion is that of the City of Antwerp, frankly modern in conception, with two long wings and a stately vertical tower marking the central entrance.

Architects should certainly see this exhibition, for there is much of interest which cannot be touched on here, particularly in the arrangement for lighting the various avenues and buildings.

Franco-British Union of Architects.

The 10th annual general meeting of the Franco-British Union of Architects will be held at Oxford from July 11 to July 14. The programme includes visits to buildings of interest in Oxford and a whole-day motor excursion to the Cotswold district, including Burford, Blenheim, Bourton-on-the-Hill, Broadway, Stanton, Stanway, Bourton-on-the-Water, Moreton-in-Marsh, etc. The annual general meeting will be held on Saturday, July 12, and will be followed in the evening by the annual dinner, at which a number of French architects will be the guests of the British Section of the Union. Members who wish to take part in the meeting are requested to notify the Secretary-General (Mr. H. P. Cart de Lafontaine, A.R.I.B.A.), 11, Suffolk-street, Pall Mall, London, S.W.1, as soon as possible.



From a sketch by Lieut.-Col. H. P. Cart de Lafontaine, A.R.I.B.A.

ILLUSTRATIONS

PLATES

Our plates this week include Royal Academy subjects in "Design for a Town Church," by Mr. W. J. Tapper, A.R.A., P.-P.R.I.B.A., and "Pixies' Hill," Holne, Dartmoor, by Mr. Fred Harrild, M.A., F.R.I.B.A.

Proposed Building for Institute for Research in Agricultural Engineering, Oxford.

This building has been designed for a site at Cumnor, but owing to various causes the erection has been delayed. The whole scheme will comprise the administrative buildings illustrated, with workshops and other buildings in connection with the scheme placed to the rear. Materials proposed to be used are brick of a grey tone, with stone slate and copper roofs.

Mr. H. P. G. Maule, F.R.I.B.A., is the architect.

Troodos St. George, Cyprus.

This church is being erected by the Anglican community with the assistance of the War Office, mainly for the British contingent, whose summer quarters are 6,000 ft. high upon the slope of Troodos, the highest mountain range of the island of Cyprus. The structure is of stone, quarried close to the site, the roofs being covered with local tiles, which are about twice as thick as the ordinary English pin tile. The type is based upon that of the characteristic local church building which grew up on the mountain sites in the 16th and 17th centuries, and has subsisted until almost to-day. This had its origin in the influence left by the remarkable architecture of the Lusignan Dynasty, and is particularly suited to the climate. An element of English work has been introduced to suggest home influences. The ikon of St. George framed into the gallery was a gift of the Governor, Sir Ronald Storrs.

The architect is Mr. W. D. Caröe, F.S.A., F.R.I.B.A., and the work is being executed under the supervision of Mr. Stone, Director of the Public Works Department of the island.

(The original of our reproduction is now on exhibition at the R.A.)

"Lumeah," Churt, Surrey.

The main points governing the planning of this house were: (1) The site sloped steeply from N. to S., with wide views to the N.W., but none to the S., and it was therefore impossible to obtain, with the compact planning required, both sun all day long in the main living and bedrooms and the fine view. The position of the road to the E. and the general lie of the land and surroundings had also to be considered. (2) The client, Mr. G. Andrew Bird, required a waiting-room on the first floor for panel patients with separate entrance and staircase on the south, a laboratory and a consulting room between this and the waiting-room. There are four additional rooms in the roof and a box room and large servants' bathroom and lavatory.

The materials used were local grey and plum-coloured stocks for the walls with red facing bricks for dressings and special red moulded bricks for the pediment, etc.: local wire-cuts were used for the interior walling and local dark sand-faced tiles for the roof. The front-door surround and overdoor are of Bath stone. There are oak floors to hall, drawing and dining rooms, and "Vita" glass to nursery windows. Domestic hot water is obtained from a "Cookanheat" range, and also from a gas Califont to bathrooms. Central heating is from a separate boiler. Internal doors to principal rooms are faced with flush plywood of mahogany, oak or walnut to match the furniture for the rooms. Gas fires are in principal bedrooms, with simple modern surrounds of tile and wood. All principal bedrooms and dressing-room have built-in fitments with drawers and hanging space and fitments also in kitchen, pantry and laboratory. The garden is laid out with a grass terrace and small sunk garden to the west, leading to a tennis-court, which is sheltered on N. and partly on E. and W. with a dry stone wall, along the top of which to the N. runs a pergola. Wide stone steps are placed axially N. and S. of the grass terrace. The general contractors were Messrs. Exors. of the late A. Chuter, Frensham. Amongst the sub-contractors were: Heating, G. N. Haden and Sons; electric power and lighting, W. J. Bird, Brixton; Califont, Ewarts; baths, etc., John Barker, Kensington; stonework, Bath and Portland stone firms; curtains, etc., Heal and Sons. The architect is Mr. W. J. Palmer-Jones.

(The original drawing from which our reproduction is taken is now on exhibition at the R.A.)

A Concert Hall.

This design has been prepared as a R.I.B.A. Final Examination Testimony of Study, and is by Mr. A. E. H. Simms. The Board of Architectural Education wish it to be known that these drawings are published for the guidance of students, not as perfect solutions of the subjects, but to show the general standard of Testimonies of Study approved by the R.I.B.A.

WESTPORT CHURCH, IRELAND.

Following are details of this work which was illustrated in our last issue:—The reconstruction of this old church, built just a century ago, was begun a couple of years ago, and is now completed with the exception of the front section, which is deferred for the present. The old church, a low and plain structure, stood parallel to the Mall, a rather picturesque tree-bordered quayside, through which the river flows: the new building has been erected at right-angles to the street, and the old church has, for the present, been incorporated in the scheme, forming a sort of narthex at the main entrance, and divided from the new part by an arcade of five bays with Doric columns. This suggested the use of the Doric in the nave arcade of the new church, as shown in the view of the interior, but no attempt has been made to follow classical detail, entire simplicity and restraint being aimed at. Later it is intended to demolish the old part, and to extend the church to the street, with a new front, and a plain and square, but lofty, bell tower. The plan comprises nave, aisles and transepts, chancel with apse, side-chapels and new sacristies, etc. The nave is divided from the aisles by arcades with columns of red Verona marble, with bases of grey Bardiglietto, and cream-coloured ivory stone. The nave is covered with a plain plaster barrel-vault, with intersecting arches for the circular clerestory lights. The aisles are flat-roofed in reinforced concrete, with simple panelled ceilings. The transepts are similar to the nave. The crossing is covered by a dome which rises internally to a height of 78 ft. above the floor. The floors throughout are of marble mosaic, except in the chancel and chapels, where they are laid with paving of various coloured marbles. The apse will be lined with marble, and the semi-dome with gold and coloured mosaics. The side chapels are divided from the nave by gilded grilles of wrought iron. The church is the largest in Connaught, and measures 200 ft. in length from end to end, width across nave and aisles 74 ft., and across transepts 85 ft. The height from the floor to the crown of the vault is 57 ft.

The High Altar is made of Pavonazza marble, relieved with carving, panels and inlays of Rossa Antica and various other coloured marbles. The altar steps are also of Pavonazza. The altar is covered by a "Ciborium" of marble, with gilded dome. The hanging crucifix and the candlesticks are of wood gilded and relieved with colour. The tabernacle is of bronze gilded. The Communion rails are of Pavonazza marble with coloured panels, and have bronze gates. The pulpit is also of Pavonazza and various coloured marbles, black and gold marble being used in the altars, pulpit, etc., to give value to the colours of the marble. The architect is Mr. R. M. Butler, F.R.I.B.A.

WEST HARTLEPOOL OPEN-AIR SCHOOL

A LIMITED competition has been held by the Education Committee of the West Hartlepool Corporation for designs for the erection of an Open-Air School in Elmwood-road, West Hartlepool, to accommodate 150 children. The assessor, Mr. F. Willey, F.R.I.B.A., of Durham, has made his award as follows:—

Design placed *First*—Mr. J. W. English, West Hartlepool.

Design placed *Second*—Messrs. Hays and Gray, FF.R.I.B.A., West Hartlepool.

Design *Commended*—Mr. J. H. Garry, West Hartlepool.

The successful design is illustrated in this issue.

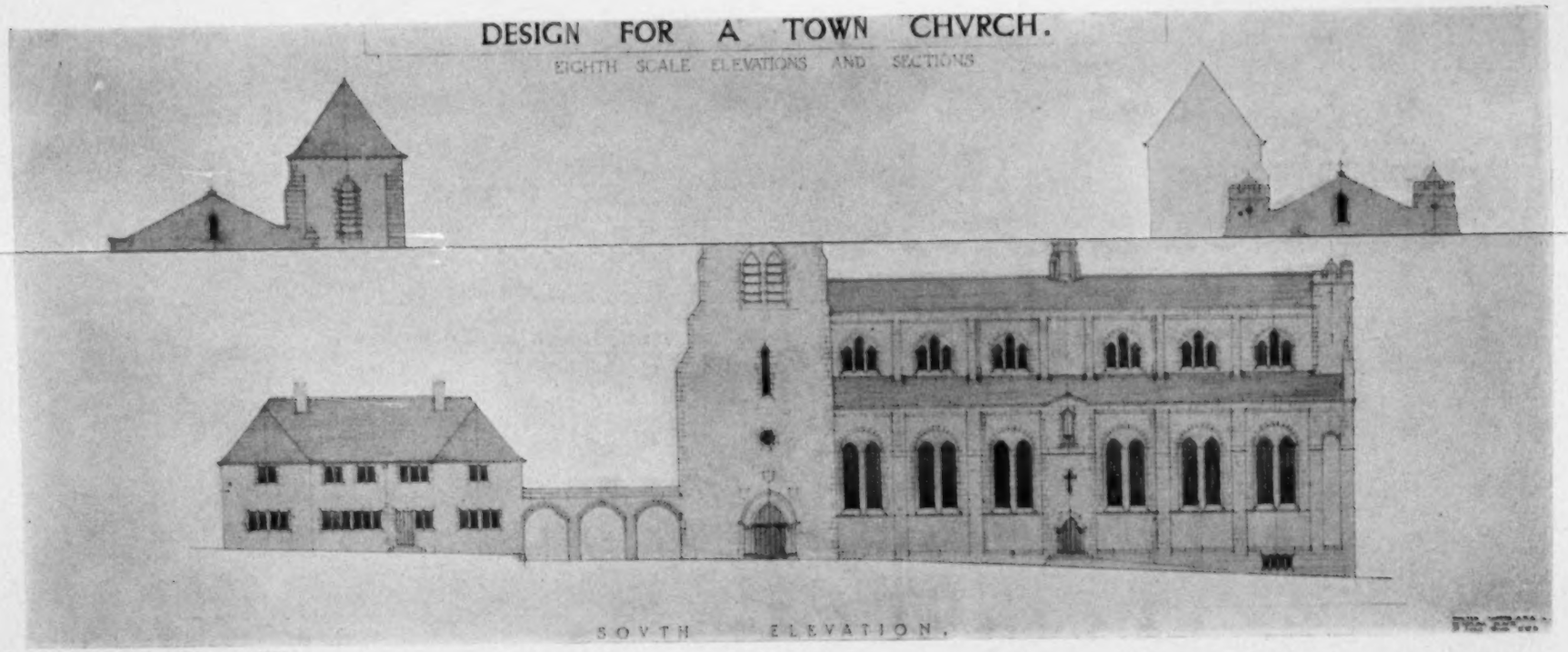
The site, which has an area of between three and four acres, is pleasantly situated in Broomhill-gardens, near Elmwood-road, on the outskirts of the borough and within convenient reach of the tram and 'bus lines. The competitors were required to provide accommodation for 150 children, with not more than 30 children in any class. Dining, staff, bath, and cloak room accommodation was required in addition. The aspect, shape, and area of the site readily lend themselves to the provision of playing fields and gardens.

An open-air school is primarily intended for children selected by the medical officer as needing special open-air treatment for malnutrition, rickets, anæmia, or for those children who, though not actually tubercular, are, in their ordinary surroundings, likely to develop tubercular tendencies, or for children recovering from illness or surgical treatment. The object of the school is remedial, and its purpose, therefore, is more medical than educational. The curriculum is arranged rather to take the mind of the child away from its sufferings than to impart ordinary knowledge, and by exercise, rest, and a suitable diet to place the child on the road to recovery and health. An open-air school in these respects is different from an ordinary elementary school arranged on open-air lines, although the latter is frequently referred to as an "open-air school." The daily routine of the school affects, of course, the planning. The educational side of it has a strong bias towards light manual or practical work, nature study, gardening, games, and light physical training. The routine is arranged to ensure a maximum amount of sunlight and fresh air, and, points to which importance is attached, a suitable diet and adequate rest. Breakfast, dinner, and tea are taken at the school, and it is usually a rule that all the children spend one or two hours in the middle of the day either sleeping or resting in a horizontal position. For this purpose adequate floor area should be available for use on wet days, and to facilitate the storage of the folding couches or beds.

The selected scheme is well balanced. There is a free access of air all round, and the plan is sufficiently compact for working purposes. Full advantage is taken of the southern aspect, and the buildings are placed to give protection, as far as possible, from the N.E. winds. The classrooms are of the individual type, separated from each other, and arranged with three sides that may be thrown open or closed, when required, against wind or rain, and with ventilating windows on the remaining northern wall. The administrative buildings are conveniently planned. The hall may be opened on three sides, and readily lends itself for assembly, dining, and other purposes. The accommodation consists of five separate classrooms, teachers' room, dining-hall, with servery, kitchen, pantry, and stores; spray baths, with changing room; separate cloakrooms for boys and girls, with hat and coat rails, boot racks, blanket racks, lavatory basins of the spray type, and separate receptacles for towels, tooth-brushes, and brush-and-comb bags, and with separate out-offices approached from either under cover from the main buildings or from the playgrounds

Design for a Town Schools; Plans.

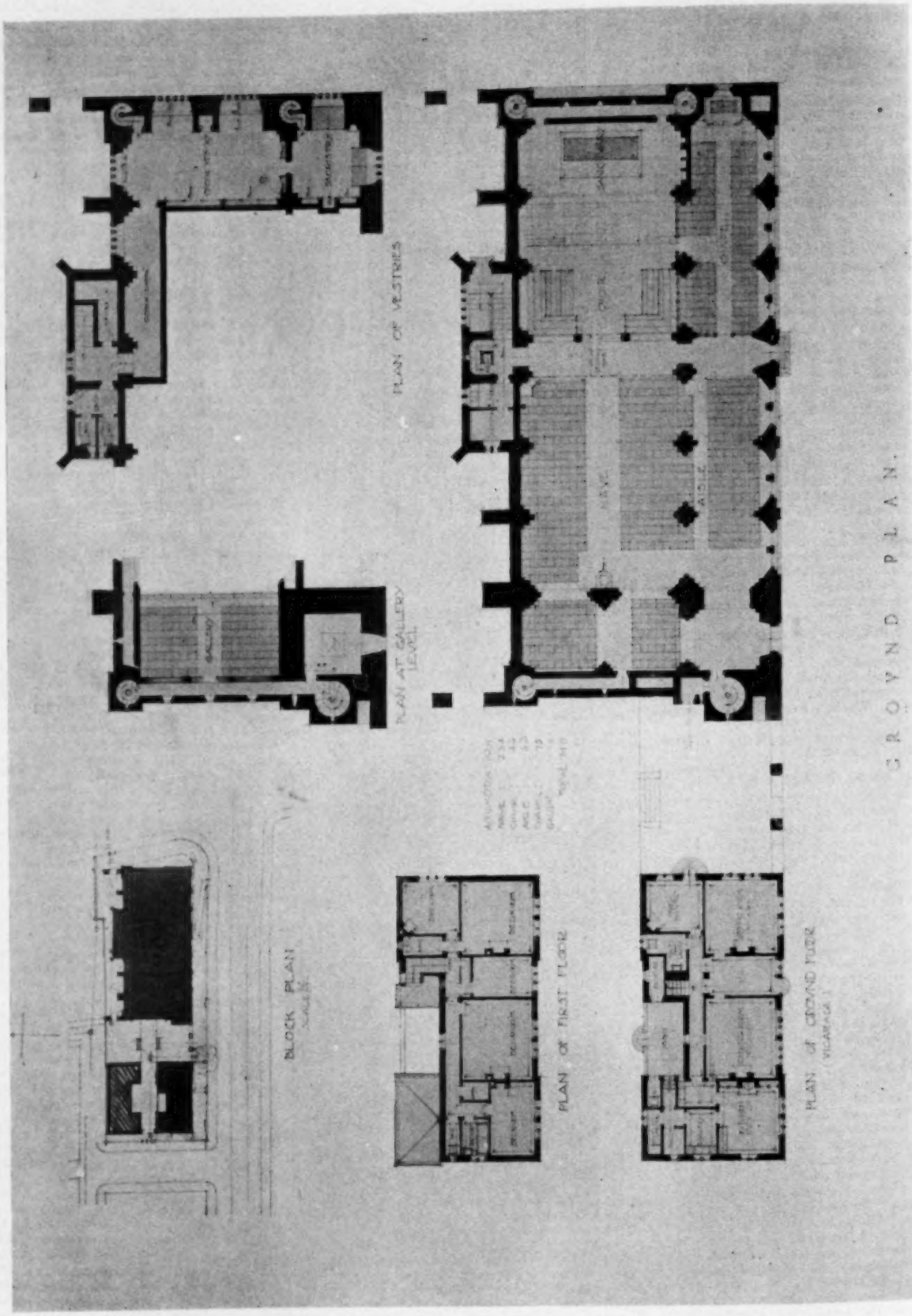
Mr. Warren Tatton, A.R.A., F.S.A.R.I.B.A., Architect.



ROYAL ACADEMY EXHIBITION, 1930.

Design for a Town Church: Elevations and Section.

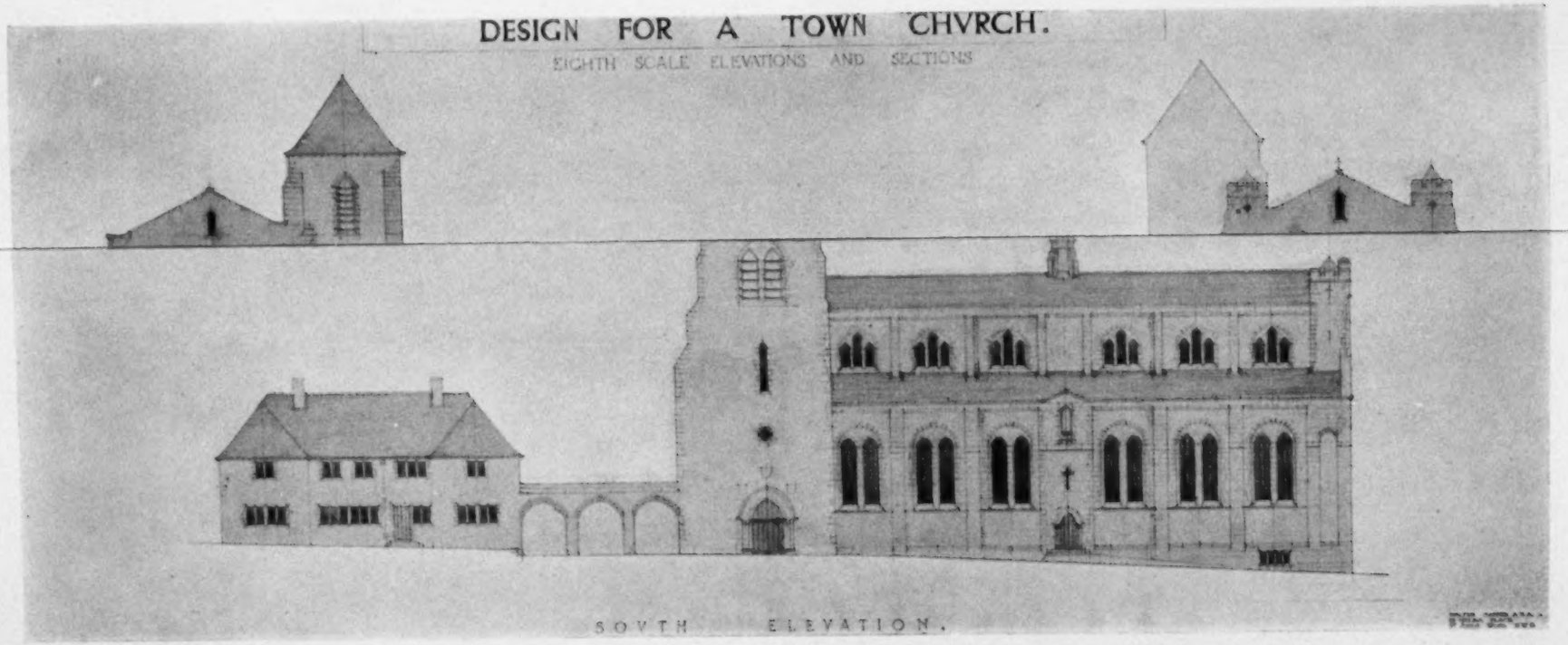
MR. WALTER J. TAPPER, A.R.A., P.-P.R.I.B.A., Architect.



Design for a Town Church: Plans.

Mr. Walter Tapper, A.R.A., F.-P.R.I.B.A., Architect.

ROYAL ACADEMY EXHIBITION, 1930.



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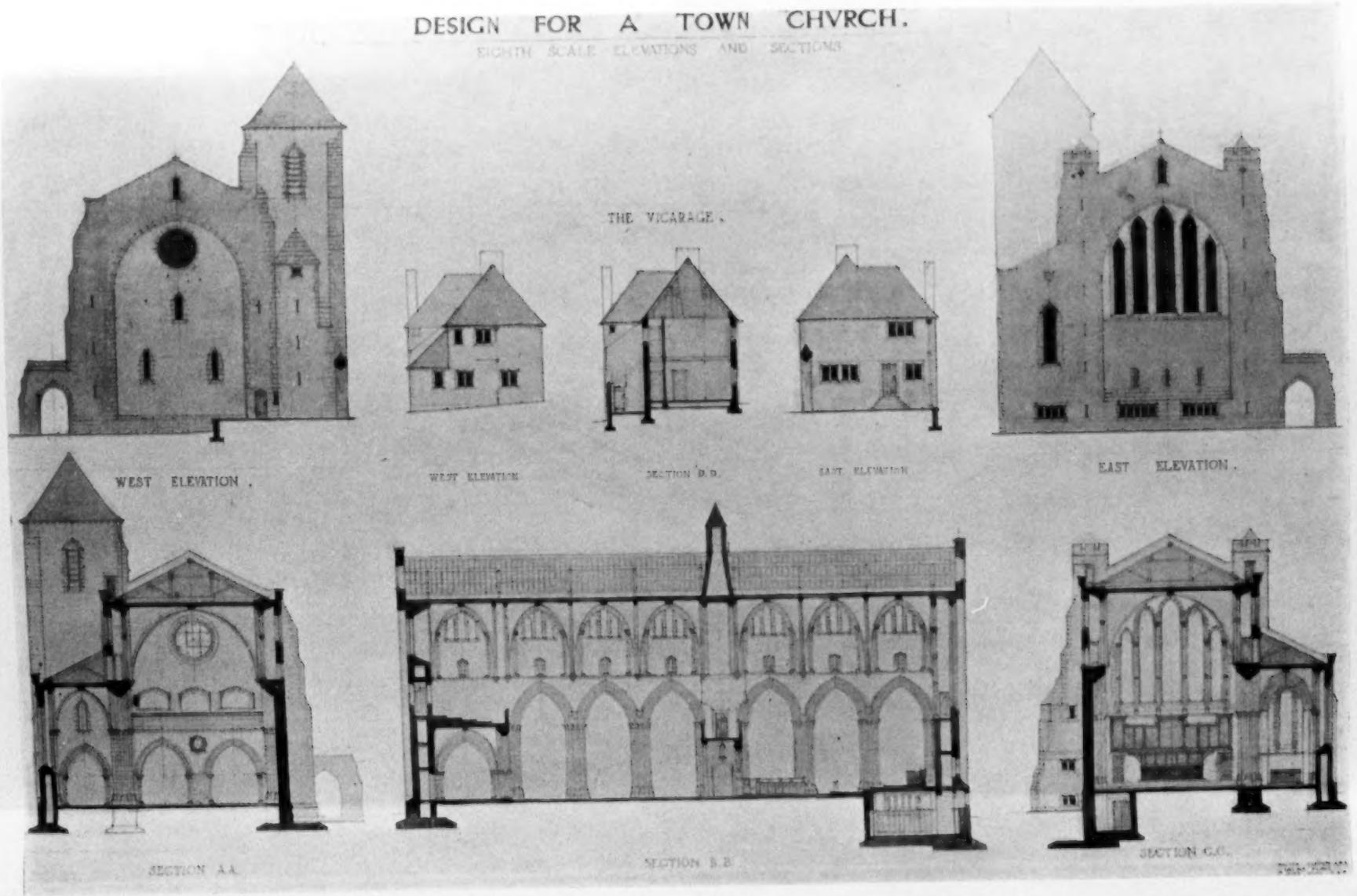

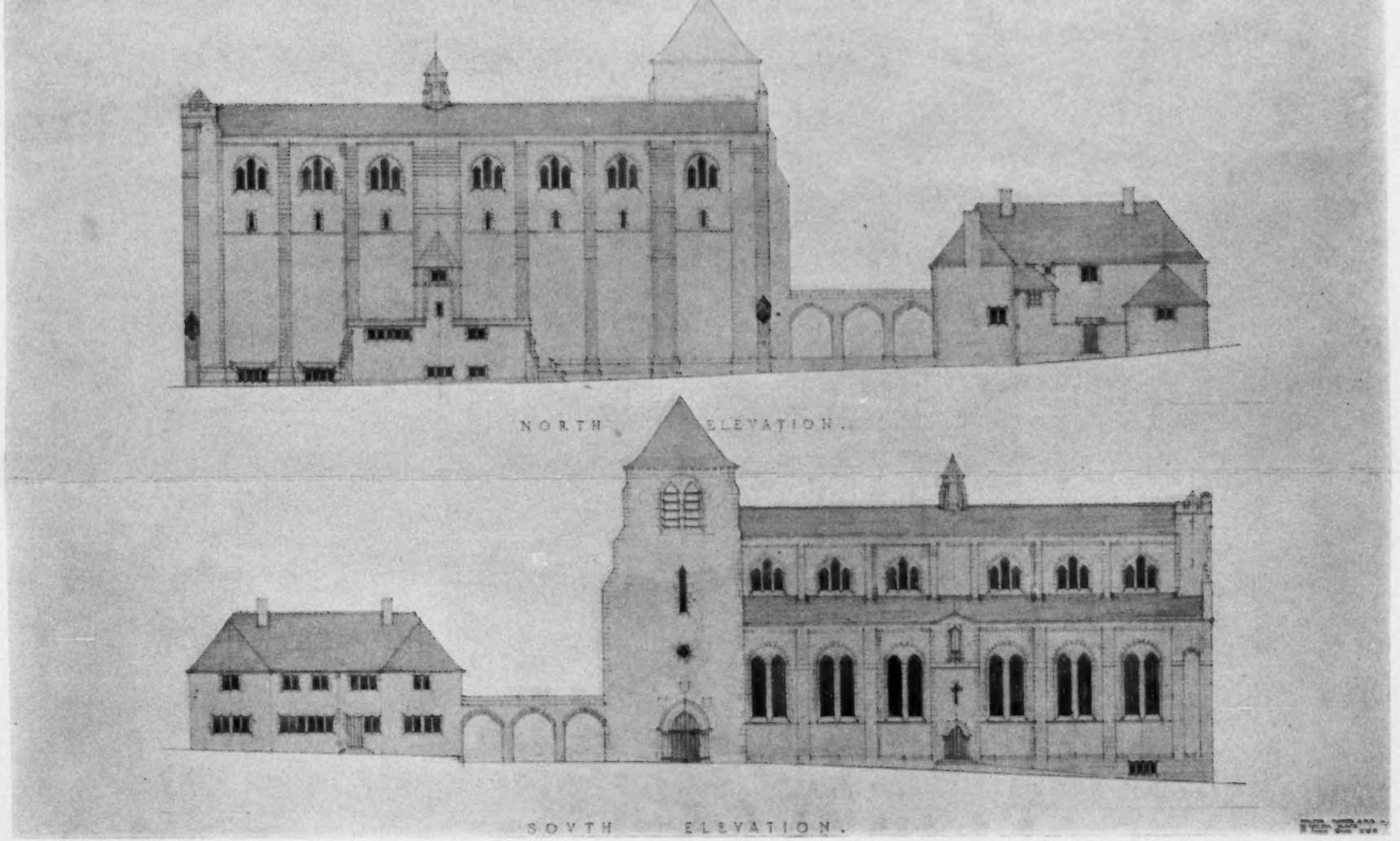

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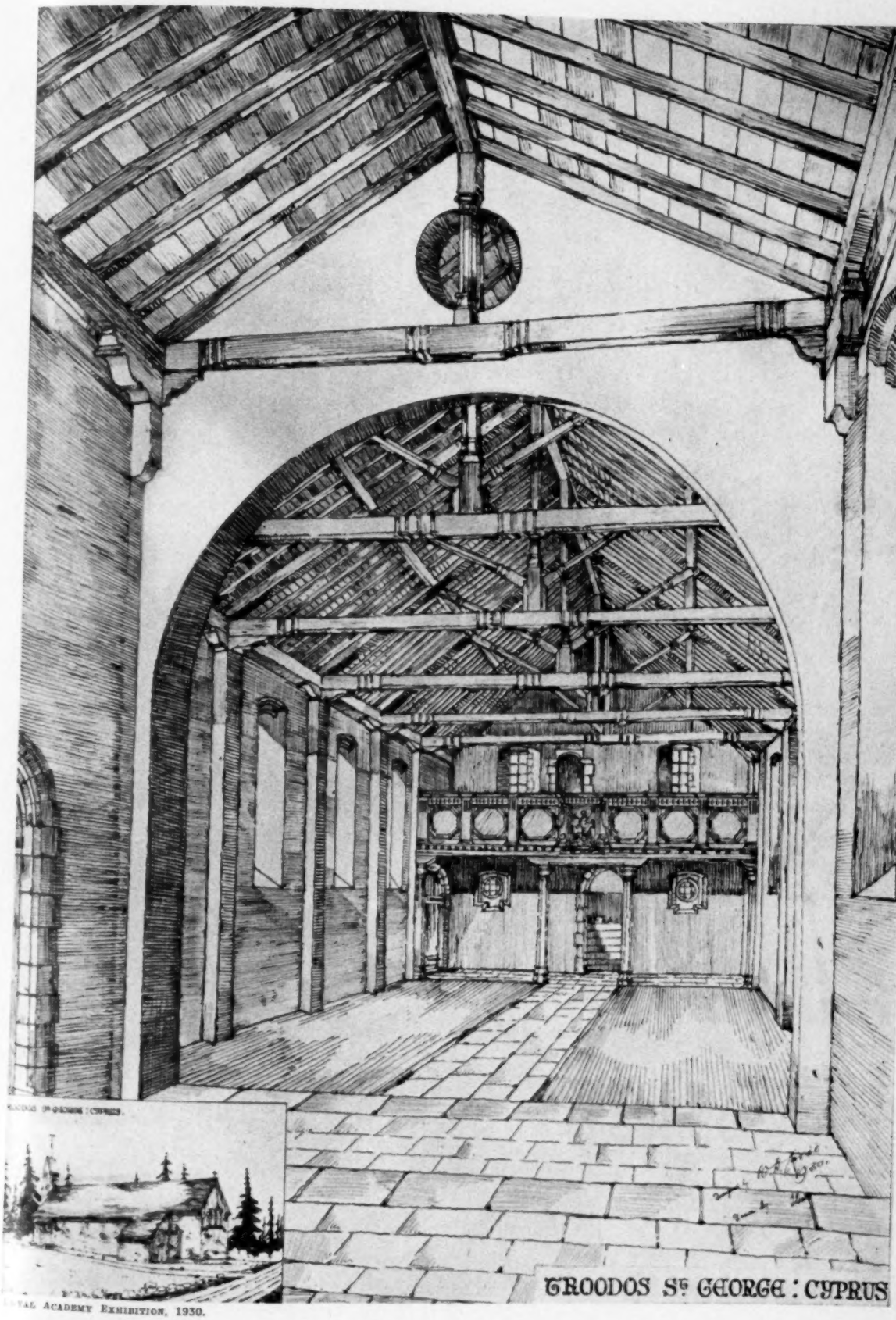
Design for a Town Church: Elevations and Section.

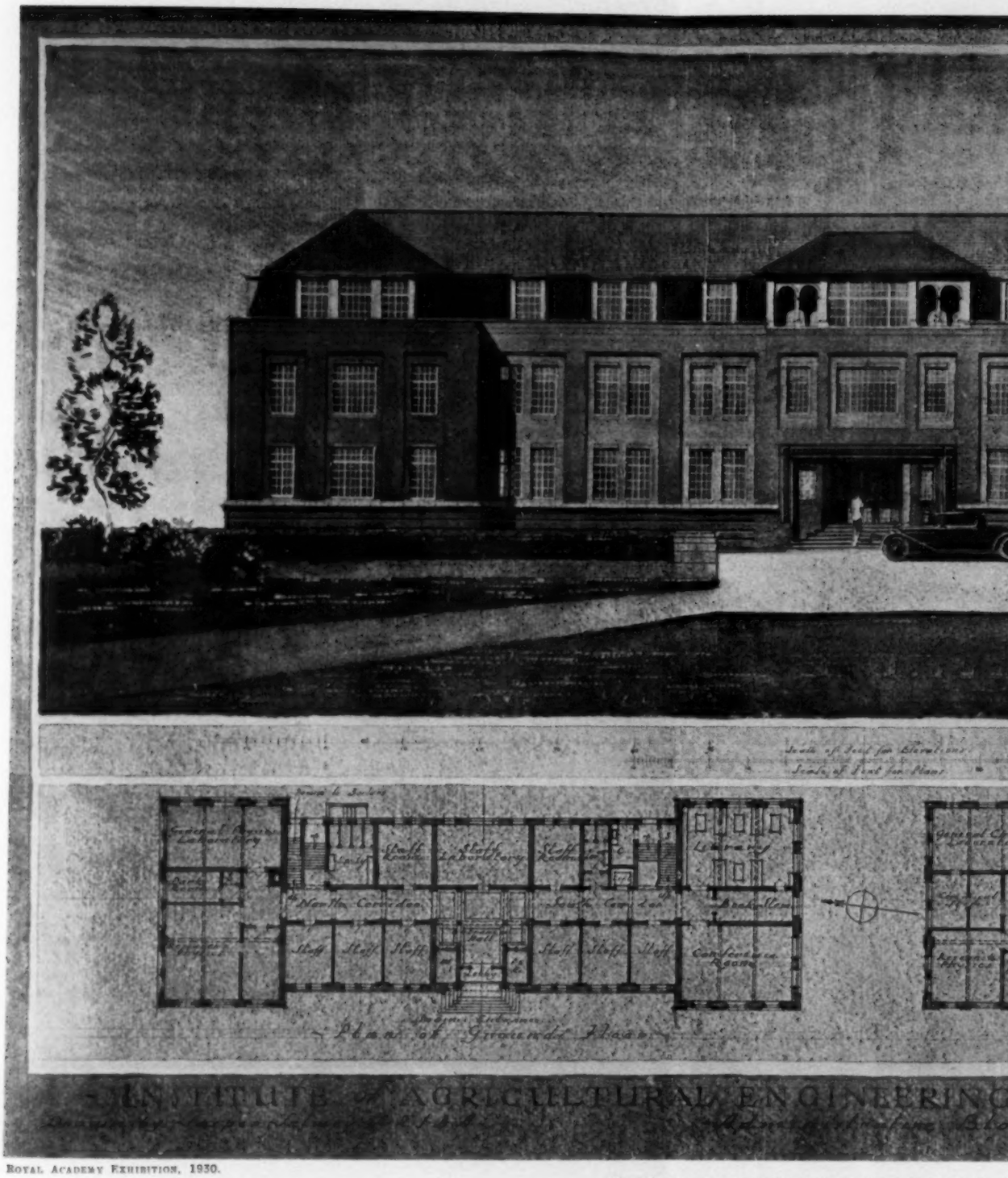
MR. WALTER J. TAPPER, A.R.A., P.-P.R.I.B.A., Architect.



ROYAL ACADEMY EXHIBITION, 1930.

Troodos St. George, Cyprus.

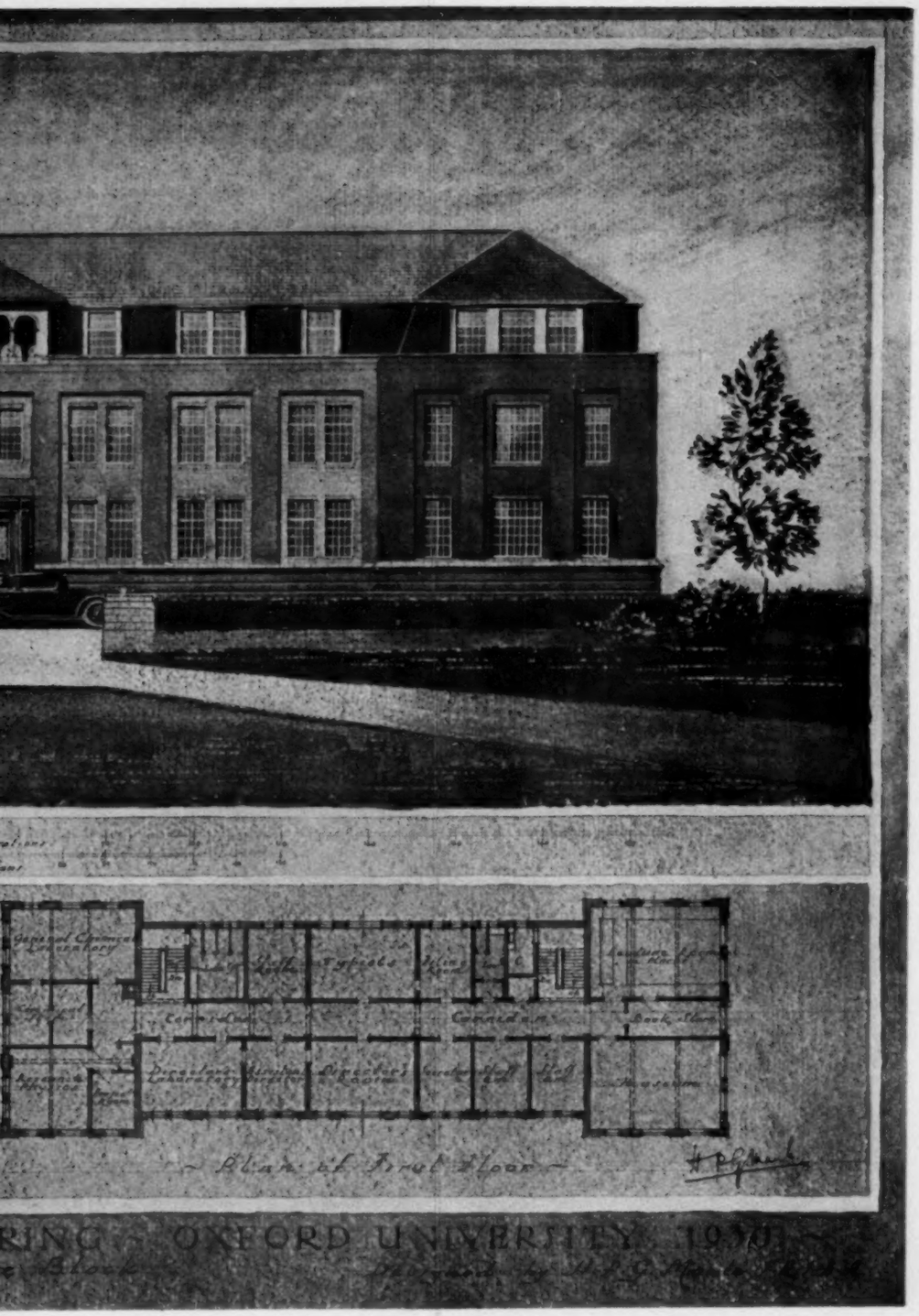
MR. W. D. CARÖE, F.S.A., F.R.I.B.A., Architect.



ROYAL ACADEMY EXHIBITION, 1930.

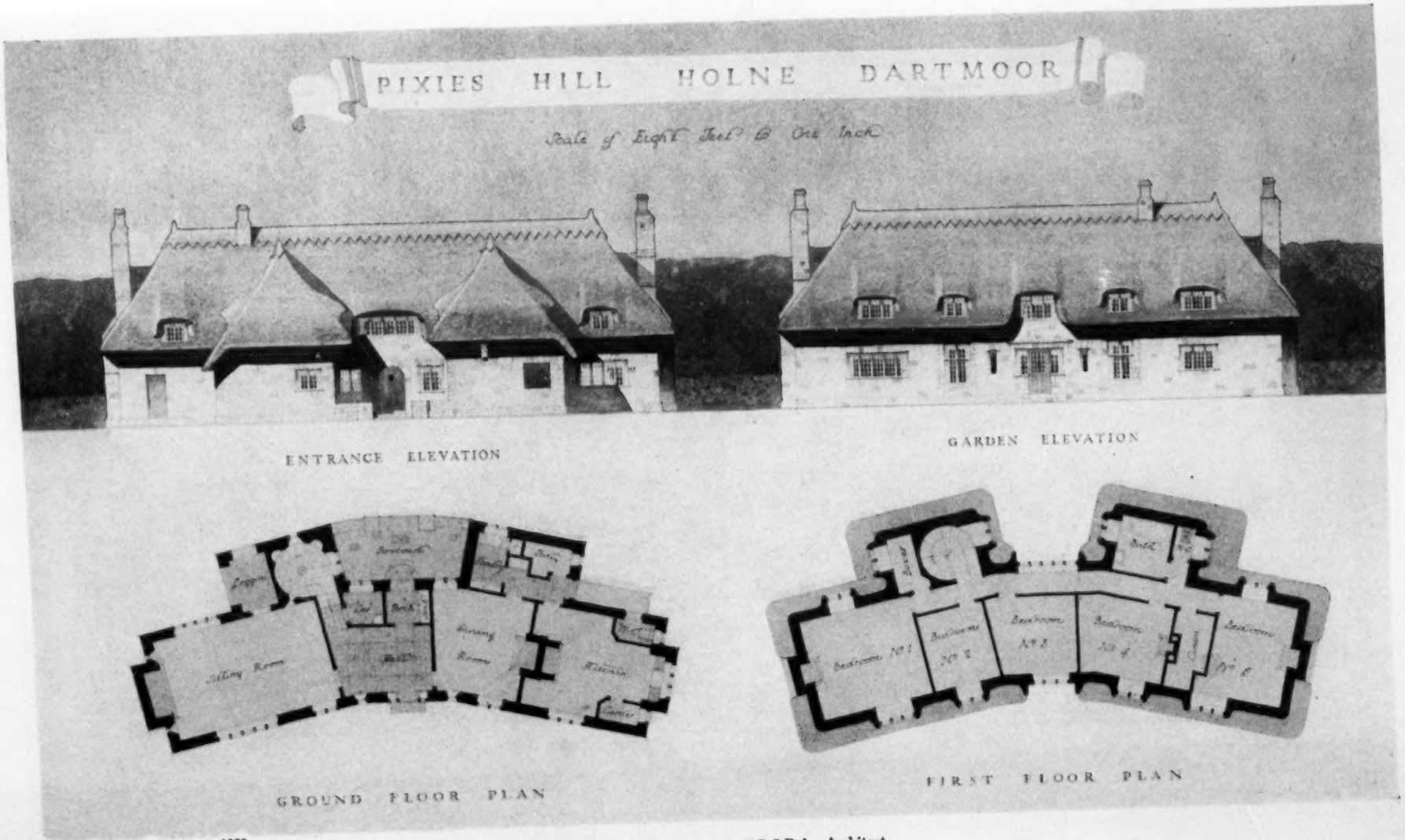
Institute of Agricultural Engineering, Oxford

MAJOR H. P. G. MAULE, F.R.I.B.A., Arch



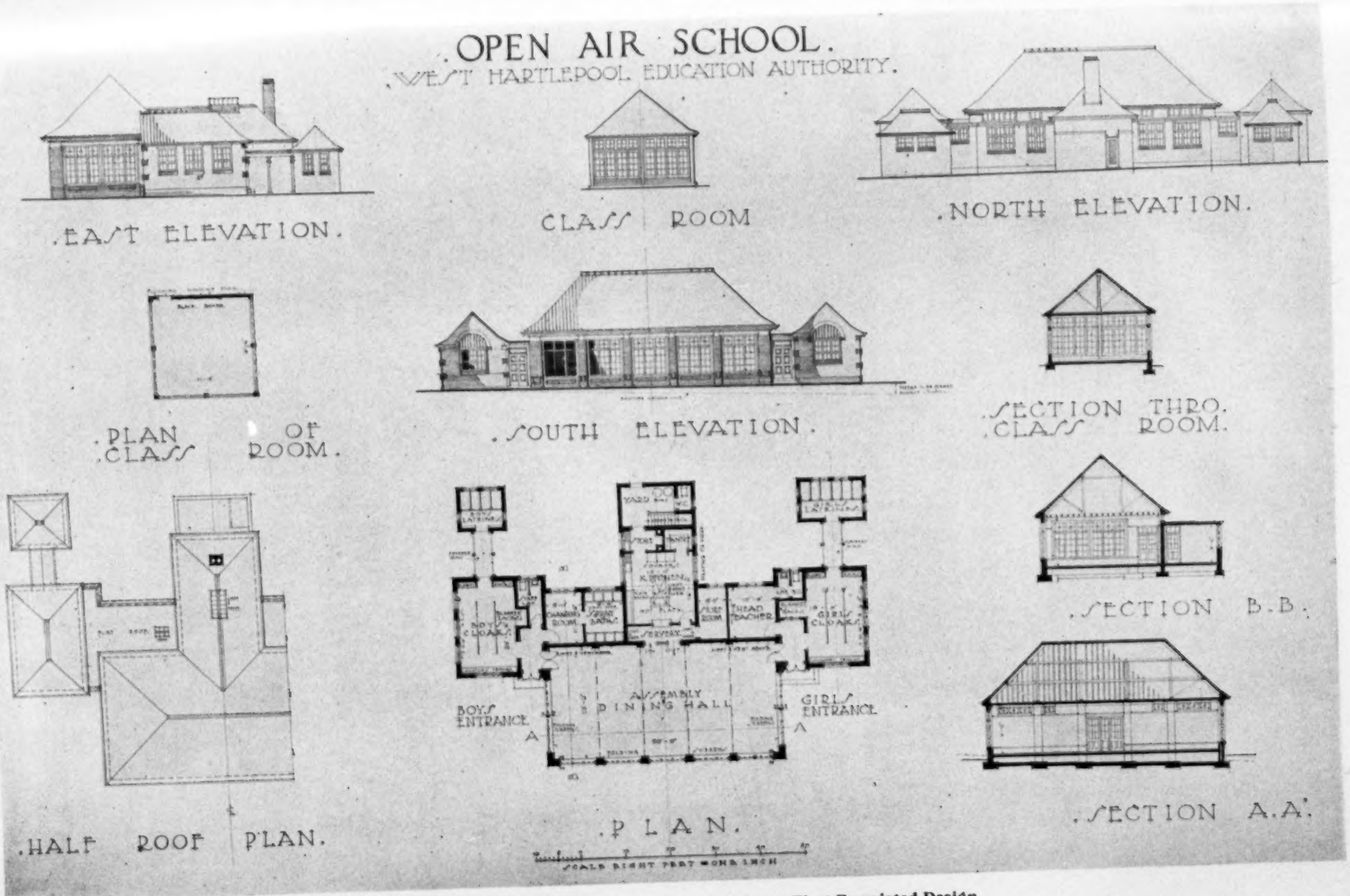
ng, Oxford University.

.B.A., Architect.



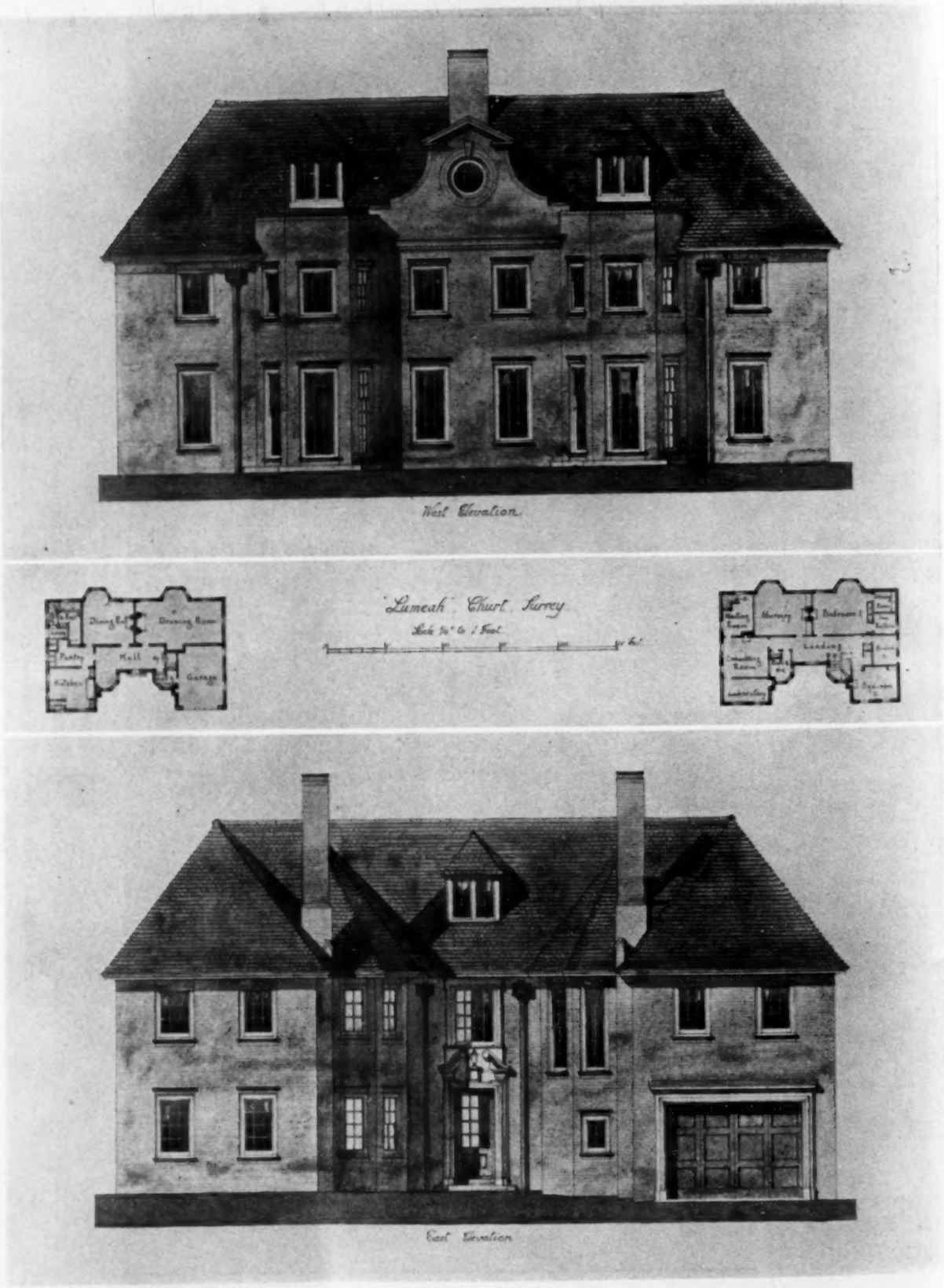
ROYAL ACADEMY EXHIBITION, 1930.

MR. FRED HARRILD, M.A., F.R.I.B.A., Architect.



Competition for Open-Air School, West Hartlepool : First Premiated Design.

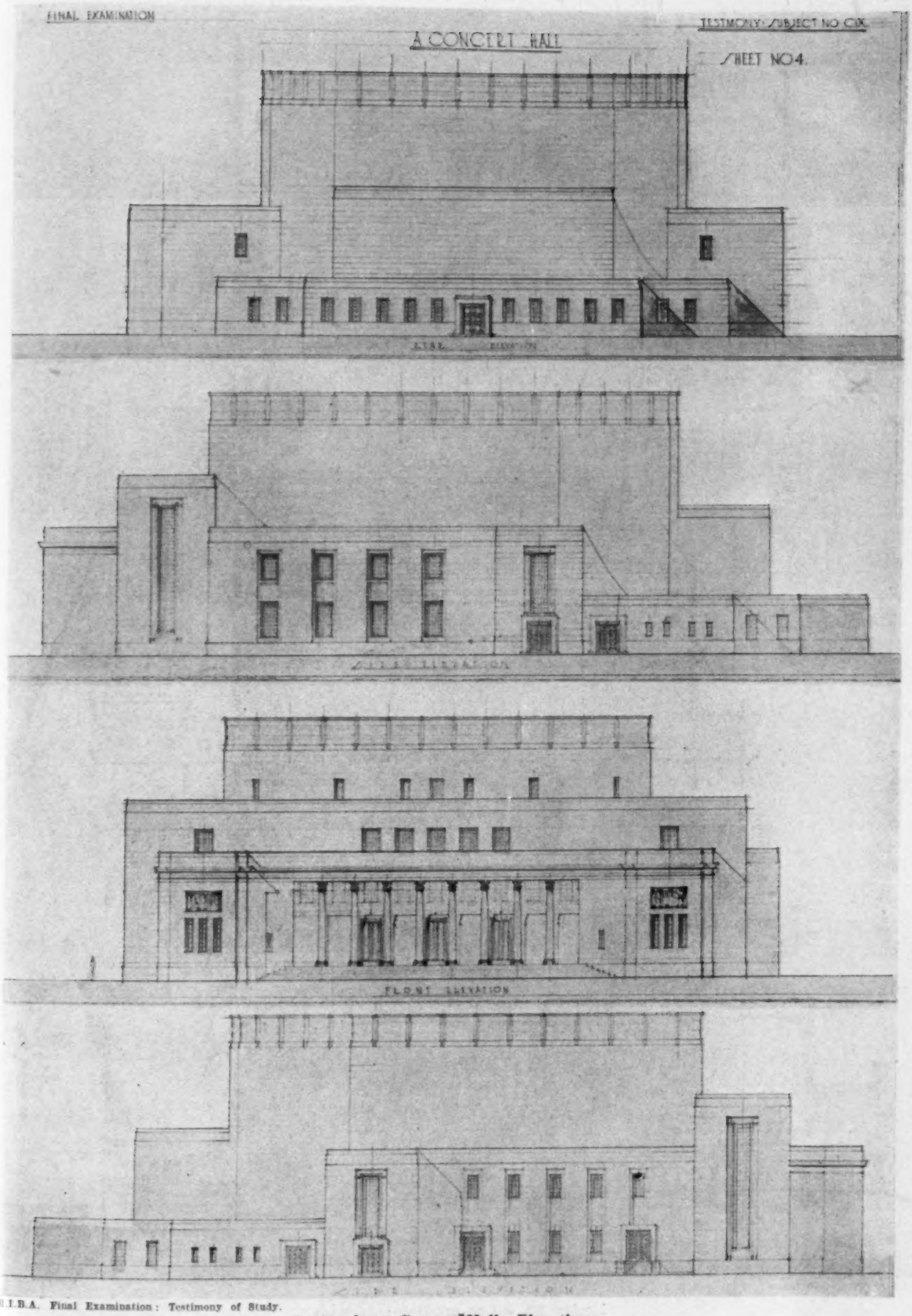
MR. J. W. ENGLISH, L.R.I.B.A., ARCHITECT.



Royal Academy Exhibition, 1930.

"Lumeah," Churt, Surrey.

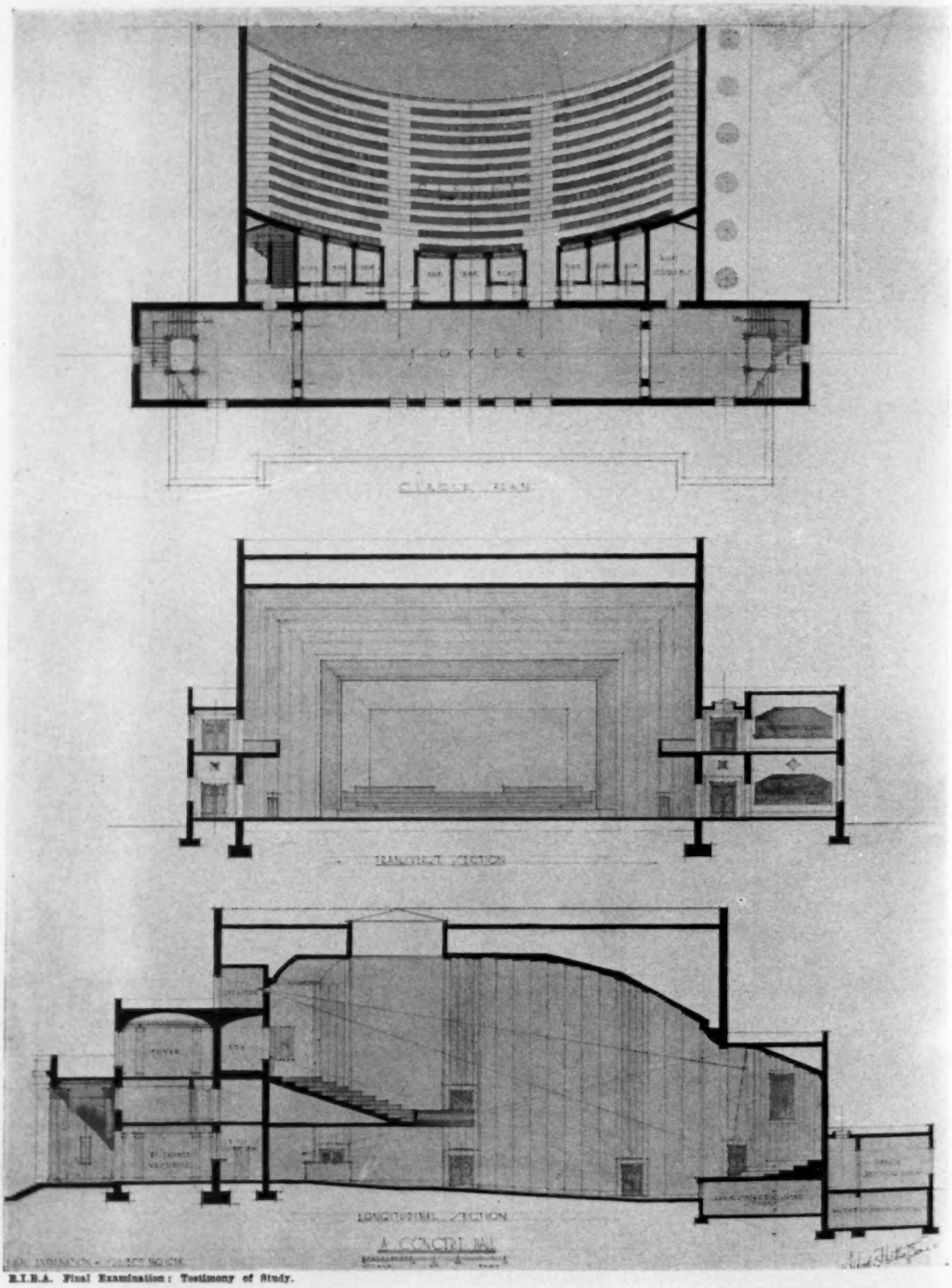
Mr. W. J. Palmer-Jones, Architect.



R.I.B.A. Final Examination: Testimony of Study.

Design for a Concert Hall: Elevations.

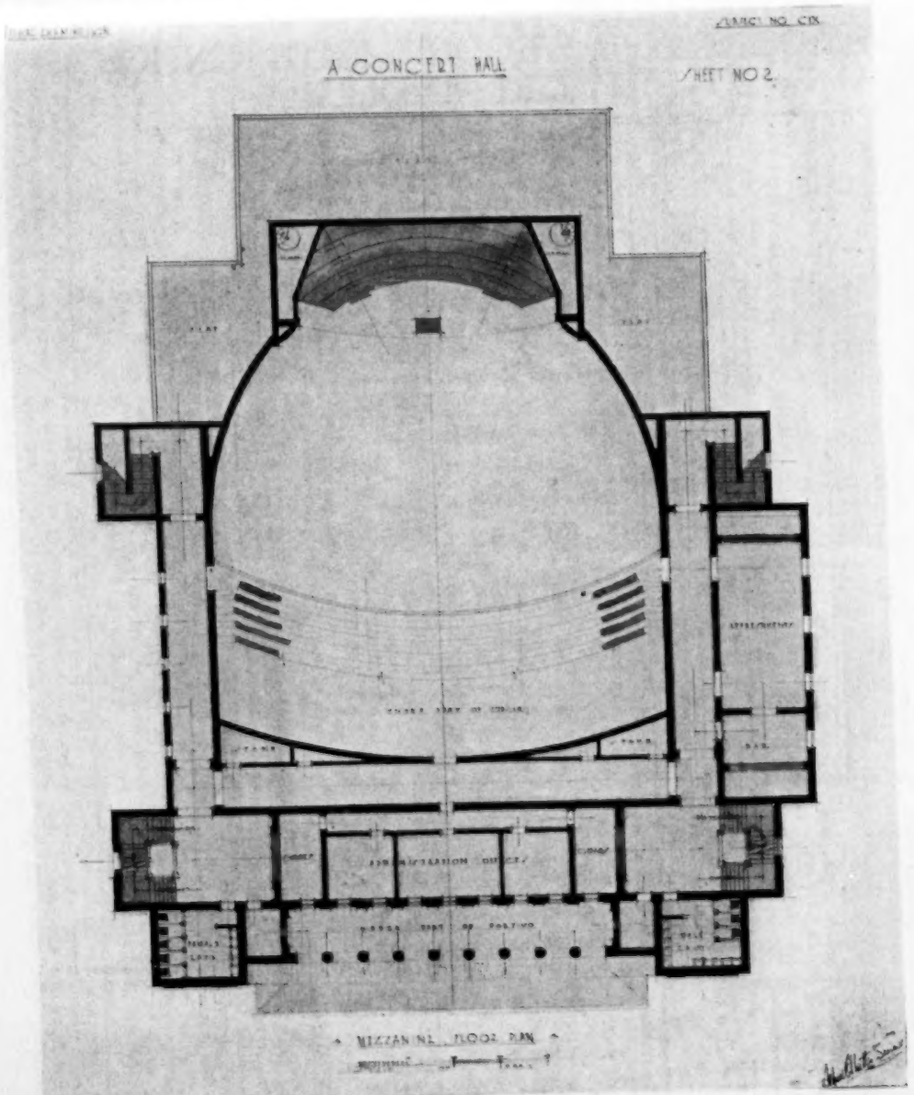
By Mr. A. E. H. Simms. (Published by arrangement with the Board of Architectural Education.)

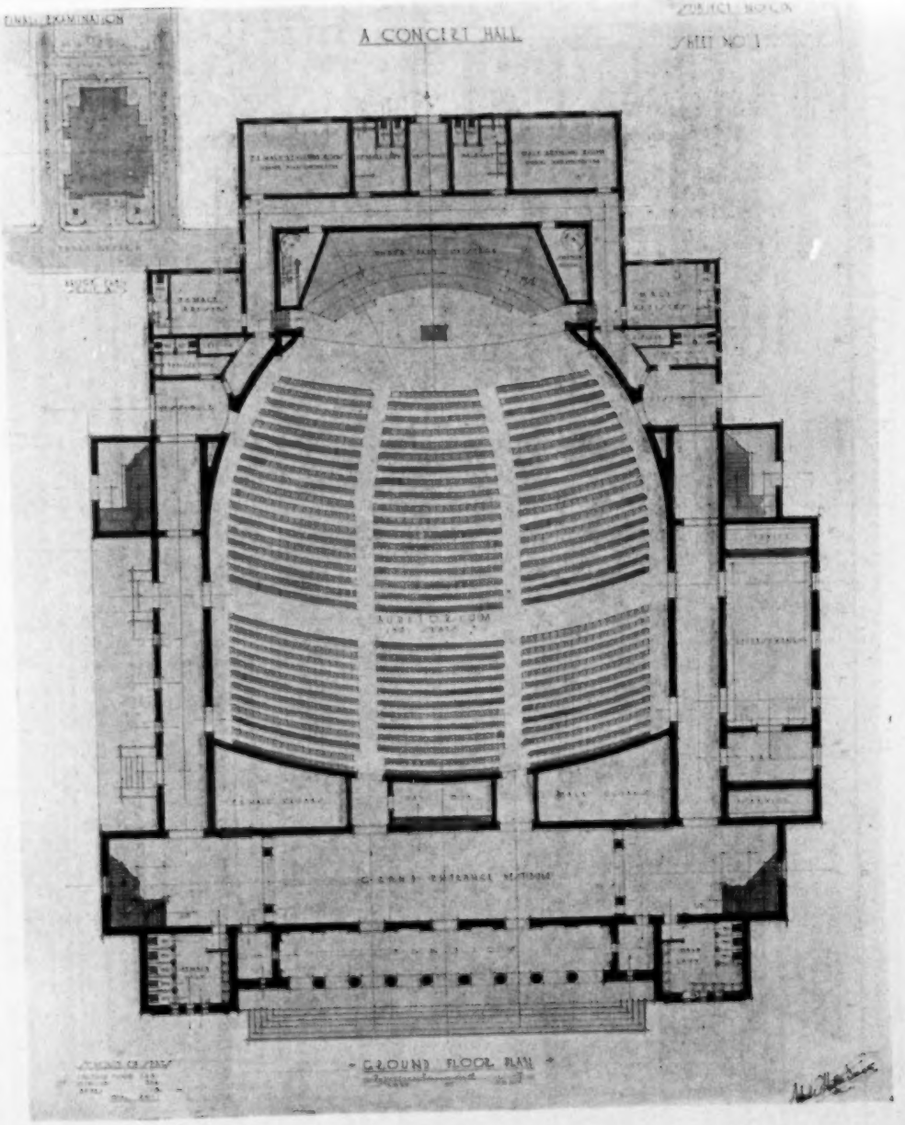


R.I.B.A. Final Examination: Testimony of Study.

Design for a Concert Hall: Sections.

By Mr. A. E. H. Simms. (Published by arrangement with the Board of Architectural Education.)





R.I.B.A. Final Examination: Testimony of Study.

Design for a Concert Hall: Plans.

By Mr. A. E. H. Simms. (Published by arrangement with the Board of Architectural Education.

Fig. 28.—See "Acoustic Construction." (page 1049).

ACOUSTIC CONSTRUCTION—XI.

By C. W. GLOVER, A.M.Inst.C.E., M.I.Struct.E.

SOUNDPROOF DOORS.

FIG. 28 shows typical details of soundproof doors, which should, of course, be constructed on principles as nearly as possible equivalent to those set out for walls and partitions.

The provision of elaborately padded and even expensively upholstered doors has not been uncommon in the past, it being generally assumed that the absorbent surface assists in the prevention of transmission of sound. For the reasons already explained, a highly reflecting surface is really preferable, provided the door itself is laminated in construction, with sound-absorbent materials embodied in the interior.

Experiments have proved that as much as 17 per cent. of sound transmitted through a closed door can be eliminated by the mere provision of caulking round the edge and the reader will readily appreciate that an expensive soundproof door may be little short of useless if it is not made a good fit.

It may generally be taken that for adequate sound insulation a soundproof door should be reasonably airtight when closed and the details shown on the accompanying illustration indicate a means of effecting this.

Automatic felt plungers fixed to the bottom of the door seal the opening under the door when closed, though if conditions of the installation permit, it is better to provide a step at the doorway so as to get a more effective seal. Round the jambs rubber gaskets are fixed and the door, provided with a strong three-lever door handle, presses hard upon its seating and forms an effective seal.

It is, of course, not possible to provide the equivalent of thick, massive walls or a structure with isolated surfaces without physical contact between them and at the same time provide a door which will be easy of operation.

Detail A shows a single soundproof door which would be suitable for domestic or hotel work. This door is constructed of metal-faced plywood on both sides, screwed to wood fibre boards attached to the timber frame, the interior of which is loosely filled with two layers of eelgrass quilt. Between the plywood and the fibre board, and the fibre board and the frame, a layer of thin felt is used to break structural contact as much as possible. Metal-sheathed moulding planted on to the outside of the door can be used with advantage to form any panelled effect required.

If doors made to detail A are used in highly damped rooms a curtain should be hung over the door opening on the inside of the room, otherwise the sound energy condition of the room is likely to be altered.

Detail B shows an improved construction of soundproof door, which, under normal circumstances, may be considered to have a reduction factor of about 35 sensation units. In this door a timber frame filled loosely with two layers of eelgrass quilt is covered both sides with solidly built laminated doors. These latter are square framed, and filled with G. & T. boarding in three layers, laid cross-grain, with the object of obtaining maximum rigidity. To each outer face metal-covered plywood is applied, and felt is used as before to separate each unit of the construction. Flexible metal weather strips serve to improve the fit of the door, and should be installed when the highest efficiency is of importance.

The provision of glazed openings in these doors should be avoided as far as is possible, but, if required, these should be constructed on the lines laid down for soundproof windows. When installing door frames in soundproof walls and partitions, care should be taken to insert felt or the like insulator between the frame and the wall, and, in the case of linings to door openings, fibre boards or divided linings with felt strip should be used. Doors of this type also have very high heat insulation in fire-resisting qualities

The table below gives the results of sound transmission tests through doors and windows carried out by P. E. Sabine. His results are given over a wide range of frequencies in terms of sound reduction factor $1/1_2$, which is the ratio of the initial intensities of sound on each side of the partition. This reduction factor does not give directly the coefficient of transmission, but may be taken as a comparative indication of the respective sound insulating value of the different constructions described :—

SECTION XI.

SOUND TRANSMISSION THROUGH DOORS AND WINDOWS.

(P. E. Sabine.)

Construction.	Sound reduction factor ($1_1/1_2$) for frequency. 64	128	256	512	1024	2048	4096
Doors, 79 in. × 31 in.—							
Light birch veneer, 4-panel	22	20	41	110	190	160	66
Solid oak, 1¾ in. thick, with cracks as ordinarily hung	18	14	32	110	160	42	57
Solid oak, well-seasoned and air-tight	50	32	66	190	370	330	210
Solid oak, swollen with dampness	200	100	80	190	370	410	630
Double-wall, "cold-storage" door—							
4 in. thick	26	44	120	510	870	780	760
¼ in. solid steel	580	320	490	1300	4400	1400	830
Windows, total opening 79 in. × 31 in.—							
¼ in. glass, 12 panes	60	49	68	140	380	230	150
3/16 in. plate glass, 4 panes	200	110	79	260	320	120	620
3/16 in. triplex glass, 4 panes	190	56	23	180	280	160	360
3/16 in. glass, small-leaded panes	130	84	100	270	1100	600	400
3/16 in. plate glass, 2 panes, single glazed	73	53	39	93	290	180	72
3/16 in. plate glass, 2 panes, double glazed, set in putty	80	63	91	320	540	300	220
3/16 in. plate glass, 2 panes, double glazed, set in felt	89	70	91	360	1700	1200	590
¼ in. plate glass, 4 panes	240	210	120	440	560	190	710
¼ in. plate glass, single pane	170	150	120	200	320	80	600

In the case of the doors, precautions were taken to prevent transmission of the sound through cracks, the marked improvement caused by rendering the door airtight being clearly visible by comparing the second and third sets of results tabulated.

The improvement of a steel plate door over the ordinary cold storage door is also noteworthy.

Windows.

The tabulated results of the Sabine Tests on windows shows the effect of sub-dividing the opening into two or more panes. It is interesting also to note that the Triplex glass is less effective than solid glass of the same total thickness; this is due to the greater flexibility of the former. The effect of double glazing, *i.e.*, with glass set on both sides of the same sash with 1 in. space between, is clearly indicated in the table. It is not safe to generalise upon the design of windows, as much depends upon the proportions of the framing. It is certain, however, that two independent and stiffly-made frames are superior to one single frame, even though this be doubly glazed.

The superiority of heavy window glass can only be secured by cutting down the size of the pane to prevent troublesome resonance of the glass itself. The breaking up of window panes under the influence of sustained notes of high frequency is, no doubt, due to the resonance of the glass itself, though naturally the stiffness of the frame may have a contributory effect.

Details E and *F* on the accompanying figure No. 28 show what is, in the writer's opinion, the best type of soundproof window. Two independent frames set in the window opening with fibre board pads are connected only with a wood fibre board lining, so that the physical contact between the two sides of the window is made less rigid. Casement-type windows are indicated on the detail, each side opening outwards and provided with weather strips, rubber gaskets, etc., so as to provide facilities for occasional cleaning, and to render them reasonably airtight. The glazing is best fixed in removable beads, the glass being set in washleather. The glass on the one side should be thicker than on the other in order that both sides of the window will not tune in together.

Ventilators and Open Windows.

A completely open ventilator has, of course, no sound insulation at all. Endeavours should, therefore, be made to mask all ventilators with a series of solidly constructed and highly absorbent baffles. These may be provided in a variety of ways, such as by the fixing of highly absorbent linings to the window or vent opening, and providing both inside and outside a series of absorbent louvres.

The provision of the maximum absorbent surface, and the repeated changing of the direction of flow of the air (as in the case of the ordinary silencer), are essential desiderata. Patent sound-absorbing vents of various designs are on the market, and the reader will be able to estimate the merits of any particular design if he keeps the above-mentioned general principles in mind.

OBITUARY

Reginald Bruce, M.T.P.I., A.R.I.B.A., P.A.S.I., M.Inst.M. and Cy.E.

It is with deep regret that we record the death of Mr. Bruce, after a brief illness, at the age of 47. Mr. Bruce was a prominent town planner, honorary editor of the *Journal* of the Town Planning Institute, and a member of the Council. His first big job was as regional surveyor to the Manchester and District Joint Town Planning Advisory Committee, a body comprising some hundred local authorities covering an area of more than one thousand square miles, and embracing many important towns. From 1923 to 1926 he was engaged in the preparation of the regional plan and report, in consultation with the surveyors of the constituent councils, and it was no mean achievement to guide and reconcile so many points of view, and produce a comprehensive plan which met with general acceptance. As soon as the report was published the services of Mr. Bruce were eagerly sought by similar bodies, such as the Fylde, Leicestershire, and North-East Lancashire Joint Town Planning Committees, and his report and plan for the last mentioned was published early this year. A development plan and report for the County Borough of Wallasey, which he prepared, has also been published. In addition, his services were engaged to prepare town planning schemes for a number of councils in North-East England and the North Midlands, and for the North Cheshire Executive Joint Town Planning Committee. Mr. Bruce was entirely devoted to the cause of town planning, and it is probable that the energy so expended weakened his powers of resistance when disease attacked him. His work brought him into contact and collaboration with many men who will greatly miss his charming and enthusiastic personality.

"THE BUILDER" DEBATE

XXIX.—PENCIL VERSUS CAMERA.

SIR,—It may seem that "Positive" has appropriated such an incontrovertible proposition that there can be no reasonable reply. So it seems at first reading, for I cannot dissociate myself from those who place a high value upon the educational value of the sketch-book. In ranging our ideas we have the advantage of some knowledge of a generation when, for the amateur, the camera was comparatively unknown; and of the more recent one, when the camera is ubiquitous.

I think, if we are perfectly honest with ourselves, that results favour the exponents of the camera, and while the conclusion may not be convincing, we may be on the road towards assessing the relative advantages of the two if we bear in mind that the only true test of education is by results.

Probably the chief advantage of the camera is the speed with which the record is taken, and the consequently far wider range of travel and experience that can be had in a short space of time. To the impressionable mind this rapid survey of experience, which can be refreshed by back reference of the most reliable description, must leave a firm impression. Compare it with the placid holiday of purely sketch-book days, when but a small district could be passed through in one holiday. Surely the whole sum of these annual or bi-annual holidays, occupied largely by laborious notes and sketches, can hardly leave the student much richer in experience than he was before he started. Life is not a repetition of chance experiences, but the sum experience of humanity, averaged among the many; and the nearer educational exercises can approach to this catholic conception the better will they fit us for living.

Perhaps the biggest exposure of the sketch-book mania is that more than a few of the sketches which are universally commended are taken, not on the spot, but from photographs themselves. We see most of the most ardent sketchers, armed also with a sly camera, by which means discomfort and public inquisitiveness are reduced to a minimum, while the sketch is completed in perfect indoor comfort. Now surely the extent to which this practice is followed, and the lack of discrimination generally shown between this process and genuine outdoor sketching, shows that there is more of superstition in the defence of the pencil than anything else; for how can it possibly profit a student to copy no more than a camera can see, while claiming that the eye of the camera is imperfect?

But looking to actual results, is it not a common experience that the habitual sketcher and measurer is timid in design, unless he can refer back to the exact measured prototype? I have seen architects spending hours in search of an old sketch-book, which contained "just the right thing," whereas a little bold experiment, even if tinged with the memory of a fact, would have been worth more as a progressive step than the most faithful repetition could ever be.

But the man who has travelled far and has used his camera with discretion has ever an interesting record for his service, and the rich experience of many changes and divers things. His records rather kindle a memory than repeat the once interesting thing to the verge of dullness. There is much for him to add of his own to the sum total of these suggestions, and if he is the true artist he is glad for it to be so.

To the student I would suggest that a holiday on the move, with an eye well open to the facts he seeks, and a mind retentive of those facts, is better than a static holiday producing a few brilliant sketches. The photographs may not advertise the artist as such, but they serve their very useful purpose in a way beyond the powers of pencil and sketch-book.

NEGATIVE.

SIR,—It seems that the reasons why the inventions of Wedgwood, Davy, Daguerre and Niepce, Fox Talbot, Scott Archer, Stuart Wortley and Eastman are preferable from a commercial standpoint are, firstly because they are more convenient, secondly, because they reproduce detail correctly, and thirdly, because in getting absolutely correct light and shade they also reproduce texture. To do all this equally well, pen or pencil drawings would have to be so large that they would be outside the realm of commercial politics. If an attempt is made to reproduce detail or texture in sketch book size drawings, the result is a destruction of scale. Who, for instance, could draw correctly to scale a foreground field of grass in a sketch book? Sketch book work (which is not really a subject for debate at all as, for architectural students, both young and old, there is no question about its superiority) should confine itself to its function, that is, representation by means of line. There is no outline in Nature, but there is outline and outline only with the pen and pencil. The function of colour, by which I mean water-colour, is to produce colour blending, in addition to light and shade and form, but not detail (in sketch-book size drawing). Pen drawing makes its effects by the opening and shutting of the pen, producing variety of line; pencil by strength of line. Each of these methods—pen, pencil and colour—are distinct and separate and should not be confused or used one in conjunction with the other.

O. NEWBOLD.

PETROL STATIONS IN SOUTHPORT

THE Southport Corporation appeared on May 14 before a Committee of the House of Lords—Lord Wester Wemyss in the chair—with a Bill containing over two hundred clauses conferring on them certain general powers.

There was only one petition against the Bill, which was that of the Motor Agents' Association, objecting to the Corporation having powers to make by-laws as to petroleum pump filling-stations, "to preserve for the enjoyment of the public the amenities of any street or of avoiding obstruction or danger having regard to the traffic therein." These by-laws were to be subject to the approval of the Home Secretary. The Corporation was represented by Mr. Roand Harker, K.C.; Mr. F. T. Villier Bayley, and Mr. Fitzgerald appeared for the Motor Agents' Association.

Mr. Harker, in his opening statement, admitted that the General Petroleum Act of 1928 gave to a local authority certain powers of controlling these stations by attaching conditions to the licence about the mode of storage, the nature and situation of the pumps, and the nature of the goods and the facilities for testing. But the Corporation thought that that Act was not sufficient for a great health and holiday resort. The Corporation had no power to refuse a licence or to make by-laws against a pump being placed where it would obstruct traffic or be a danger. In the borough building leases were falling in and freeholds were changing hands, and the result had been that in some cases in residential areas the owner of premises with a front garden had pulled down the front walls and erected a petrol station in the garden. Originally the Corporation proposed a clause which would have given power to refuse a licence, but on the objections of the Home Office it was withdrawn and the present proposal of by-laws was substituted.

Mr. A. W. Ross, solicitor, Southport, vice-chairman of the Parliamentary Committee of the Council, said the object of that body was to preserve the amenities of the town, which were the result of its original laying-out by three large landowners, but which might now change as leaseholds were falling in. That could not be secured under the Petroleum Act, for many streets would be injured if filling-stations were allowed. These should be confined to the shopping and commercial areas. One selfish owner in a purely residential street might erect a station, spoil the amenities, and reduce the value of the other property. The Corporation had not proposed by-laws, because by the general law they must be to preserve "rural scenery," "historic interest," "beauty," or "picturesque character."

Lord Dickinson and Lord Jessel expressed doubts whether the proposed clause really gave the Corporation more power than the general Act.

Mr. Bayly pointed out that the general Act gave no powers to deal with possible obstruction or danger.

Mr. Fitzgerald, in his cross-examination, pointed out that several boroughs had obtained by-laws under the general Act, and that the clause in the Bill gave powers over all the streets and not only residential streets.

In re-examination, Mr. Ross said that while a shop could not be brought forward from the general building line of a street, filling pumps could be brought forward.

Mr. Fitzgerald, for the opponents, reminded the committee that Parliament carefully considered the whole matter as recently as 1928, and passed an Act. It was most unusual for Parliament in such circumstances to give further powers unless a very special case could be proved. He submitted that Southport had not proved such a case. The Corporation had not even asked for the by-laws which the Act of 1928 empowered. By "zoning" under these town-planning schemes the Corporation could protect their purely residential areas. The general law gave full powers of dealing with obstruction of traffic.

The committee passed the clause and found the preamble proved.

[These excerpts are taken from the *Manchester Guardian*.]

CHARING CROSS BRIDGE

We take the following letter by Mr. Arthur Keen, F.R.I.B.A., from *The Times* of May 24:—"Colonel Wilfrid Ashley is confident that the question of cross-river traffic will now be settled by the rebuilding of Waterloo Bridge; but if one thing has been more abundantly established than another, it is that no solution of the traffic problem can be found in a wider bridge at Waterloo. As recently as in the inquiry by the Private Bill Committee this was made clear. (See answers to questions 2366/7/9 and 3035, by the chairman of the London Traffic Advisory Committee. 'Widen Waterloo Bridge if you like, but that will not solve the traffic difficulties,' and so forth.)

"Again, does not Colonel Ashley remember the report made in 1926 upon the London bridges by direction of the Ministry of Transport? These words occur:—

> It is important, if it can be done, to diminish the amount of traffic passing over Waterloo Bridge because of the congestion which this traffic occasions at the Wellington-street—Strand crossing.

"A bridge at Charing Cross is the means advocated to secure this and also to help Westminster Bridge, which 'undoubtedly needs relief from the excessive weights which are continually passing over it,' and

> to diminish the congestion which takes place on the southern side of the bridge at the point where York-road and Lambeth Palace-road are intersected by Westminster Bridge-road.

"Not only would a great stream of traffic at Wellington-street make the Strand impassable; it would also have disastrous consequences farther north."

BUILDING PRACTICE

By W. T. CRESWELL, Barrister-at-Law, Hon. A.R.I.B.A., Associate (late Fellow) Surveyors' Institution, etc.

XVII.—OFFER AND ACCEPTANCE.

The recent case of Willcocks and Barnes *v.* The Paignton Co-operative Society, Ltd., was reported in our columns on April 25 and May 9. It was alleged by the plaintiffs that the society called for tenders and sealed bills of quantities, promising not to open them unless the tender was accepted. The society did, in fact, open them and accepted the contract of another builder which the plaintiffs contended constituted acceptance by the defendants of their tender. We therefore place before our readers some points on offer and acceptance.

First, it must be remembered that a proper agreement entered into by two parties is one that the Court will enforce.

Most agreements take the form of an offer made by one party, and the acceptance of it by the other party. But there can be no contract set up whilst the parties are in negotiation. Both the offer and the acceptance may be made orally or in writing, or by conduct of the party making one or the other.

An offer must be distinguished from a statement inviting business negotiations or indicating a willingness to do business or to receive offers. Invitations to tender in whatever form they are given are mere offers to negotiate—offers to receive offers—from the persons who accept or reply to the invitations. They are not offers.

An offer must invite and be capable of acceptance. It must clearly indicate that it has been put forward in contemplation of acceptance. So a tender, inasmuch as it invites acceptance, is an offer. Also an estimate, though usually considered by custom not to be in the nature of an offer, but a statement of the amount for which certain work will or can be done, may, nevertheless, if it can be shown it is an offer to invite acceptance, be regarded as an offer. In Croshaw *v.* Pritchard and Renwick (1899), 16 T.L.R.45, the defendants gave an "estimate" for building work which was accepted, but on subsequently finding that they had made an error in their figures, they wished to withdraw their estimate and refused to go on with the work. Other contractors were employed, and the defendants on being sued for breach of the contract pleaded that they used the word "estimate" advisedly, and, moreover, that it was recognised in the building trade that there is a distinction between an "estimate" and a "tender," and furthermore, that there was a custom or well-known understanding that a letter headed "estimate" was not to be treated as an offer. It was held that there was no such custom and that there was a binding contract, and that there had been a breach of it.

Now, an offer can be revoked at any time before it has been accepted; but, the revocation is of no effect until the other party has been informed of it.

No one can accept an offer that has not been communicated to him, but once there has been acceptance of the offer it is irrevocable, and a contract is created. Mental acceptance is insufficient, nor is intention to accept sufficient. There must be a communication of the acceptance to the person making the offer. It must be an acceptance of the exact offer—complete, unconditional, and unqualified. If the person purporting to accept introduces any variation or new term in the offer he is not accepting, but making a new offer which puts an end to the original offer—and no contract arises. The parties may agree to a formal contract subsequently being drawn up, but if the offer and acceptance make a complete contract it is not affected by a mere agreement to embody the terms in formal language.

There was no acceptance in the case of Willcocks and Barnes *v.* The Paignton Co-operative Society, Ltd. (above), hence there was no agreement which the Court could enforce. The Lord Chief Justice said, "I regret that I am unable to agree with the argument of the plaintiffs, who seem to have been shabbily treated, even though it be assumed that . . . it was the intention of the defendants to accept the plaintiffs' tender, that I think is not enough. In such a case an intention to accept an offer is not an acceptance unless the information is communicated to the person by whom the offer is made, and the returning of the plaintiffs' opened bills of quantities to them . . . cannot, in my opinion, be accepted as the communication of an acceptance . . . . I think, therefore, there must be judgment for the defendants."

SOCIETIES AND INSTITUTIONS

ULSTER SOCIETY OF ARCHITECTS.

The annual general meeting of the above society was held in the society's rooms, 7, College-square North, on Monday, May 12, at 8 p.m., when there was a large attendance of members present, Mr. E. R. Kennedy (President) being in the chair. The hon. secretary read the annual report, which contained full details of the great amount of work of the council for the past year. The report was unanimously adopted. The hon. treasurer then read the statement of accounts for the year 1929, showing the funds of the society to be in a very sound position. This statement was also unanimously adopted.

The following members were elected by ballot as council for the year 1930-1931 :—Mr. J. A. Davidson, president; Mr. R. H. Gibson, vice-president; Mr. R. S. Wilshire, hon. treasurer; Mr. J. MacGeagh, hon. secretary. As members of Council :—Messrs. T. R. Eagar, E. R. Kennedy, G. O'Neil, J. Seeds, and K. Edwards. As associate members :—Messrs. B. Couser and C. McLynn. As hon. auditors :—Messrs. T. Callender and J. Scott. Discussions took place on many matters of interest to members, after which the meeting terminated.

THE SURVEYORS' INSTITUTION.

We take the following excerpts from the sixty-second annual report of the Council, presented at the annual general meeting on May 26:—

Of the many questions which claimed the attention of the Council during the year, perhaps the most important to be decided was whether the policy of statutory registration should again be proceeded with and a Bill promoted. It is now a matter of history that the Institution, the Auctioneers' and Estate Agents' Institute and the Land Agents' Society co-operated in 1923 to introduce a Bill which, although read a first time, encountered a considerable amount of opposition and did not make further progress. The promoting societies, therefore, decided to defer its reintroduction for the time being. A recent movement in favour of registration on lines somewhat opposed to those supported by the promoting societies, has led to a review of the whole policy, with the result that the Councils of the three societies have arrived at the conclusion that the advantages which might attend registration are, under present conditions, insufficient to counterbalance the loss of those attaching to the existing system.

Mr. A. Norman Garrard, who has held the office of Hon. Secretary since 1918, has intimated his wish to retire at the end of this session, a decision which the many members to whom his unfailing courtesy and tact had endeared him will learn with regret. The sincere thanks of the Council are due to Mr. Garrard for the services he has rendered to them and the Institution for the past 12 years. Messrs. T. W. A. Hayward and S. Vyvyan Hicks retired from the Council at the end of last session, the former on retirement as Borough Surveyor of Battersea and the latter on transfer to Fellowship. The Council wish to record their sense of gratitude to both gentlemen for the loyal and unselfish service they gave to the Institution during their years of office.

The statistics of membership to date as compared with those of the previous year are as follows:—In May, 1929, there were 29 Honorary Members, 2,654 Fellows, 139 Colonial Fellows, 2,960 Professional Associates, 36 Associates, 936 Probationers, 443 Students; a total of 7,197. In May, 1930, there were 29 Honorary Members, 2,675 Fellows, 135 Colonial Fellows, 3,094 Professional Associates, 35 Associates, 928 Probationers, 436 Students; a total of 7,332.

The changes in the professional examinations which are to come into force in 1932 necessitated an entire revision of the syllabus, a somewhat heavy task which was completed by the education committee during the year. The amended syllabus and rules of examination, embodying the changes proposed, are now ready for use by candidates intending to come up for examination after 1931.

In the preliminary examinations, 1930, 62.17 per cent. of candidates passed, as compared with 46.45 per cent. in 1929. The comparative figures for the professional examinations were 59.92 and 59.46 per cent.

Sixteen candidates, as compared with fifteen last year, presented themselves for the competitive examination for the University Scholarships held in January. Of the two scholarships offered, however, only one was awarded, the successful candidate being Mr. W. J. F. Jarmain (Shrewsbury School), a son of Mr. W. Jarmain. As, in the opinion of the Council, the objects of the scholarships were not being attained under the system hitherto in force, certain radical changes have been decided upon. Henceforward, one three-year scholarship of £100 per annum, tenable at Cambridge, will be offered annually, the selected candidate being required to take one out of several degree courses prescribed by the Council; and, in addition, three one-year courses of £125 each, also tenable at Cambridge, unless the successful applicant has applied to use his emoluments for travel. Holders of one-year courses will be required to state the line of study they propose to follow, and to undergo such courses of lectures and instruction as may be prescribed, and carry out an original piece of work under their supervisor's guidance. Awards of scholarships and one-year courses will in future be made by selection instead of by competitive examination.

In the recent professional examinations, out of the 289 candidates, including those from Scotland and Ireland, who were successful in the intermediate, and the 230 who passed the final, 179 and 185 respectively were prepared by the College of Estate Management, as were 9 out of the 12 candidates who passed the special single examination for degree-holders and the 7 successful in the direct fellowship. Ten Institution prizes and medals were awarded to college students.

In addition to matters of routine, the professional practice committee have considered in their general aspect questions of practice arising out of co-operation between agents for the sale of property, and in particular the proper apportionment of commission on the sale of fixtures, furniture, etc., between the co-operating agent and the one originally appointed for the sale. A case where a firm of solicitors who, in giving instructions for the sale of property, had asked for a share of the agents' commission was reported to the Law Society. Another question to which the committee are giving special attention is the growth of advertising in the profession, a problem which, as

members will realise, is beset with many difficulties. Further measures are under consideration which, it is hoped, may place the chartered surveyor more prominently before the public, and bring about a wider understanding of his functions and usefulness to the community.

The County Branch organisation has again amply proved its value to the Institution during the year, and the Council must here acknowledge their indebtedness to the chairmen, hon. secretaries and executives for the services they have so freely and unselfishly given. The annual conference between the Council and officers of the County Branches was held on March 11. The attendance was full and representative, and the debates on a number of domestic matters were especially interesting and ably conducted.

A series of joint meetings were held with representatives of the Royal Institute of British Architects, the Town Planning Institute and the Institution of Municipal and County Engineers to co-ordinate professional examinations in town planning. It has been decided as a result to set up a Joint Examination Board to organise and carry through these examinations, which will be divided into sections appropriate to the sphere of each society. A pass in the Surveying Section will entitle the successful candidate to an Institution Special Diploma in town planning.

JOSIAH WEDGWOOD

In a paper read before the Royal Society of Arts on May 28 (Mr. Frank H. Wedgwood in the chair), on the subject of "Josiah Wedgwood, F.R.S., 1730-1795, Potter, Inventor, and Man of Science," Mr. Harry Barnard said that to realise Wedgwood's place as "Master Potter," the "Father of English Pottery," as he had been justly called, it was necessary to glance at the state of the pottery industry at the time of his birth. Potting was then a home industry, carried on at the back of the modest thatched house, with one oven that served more than one potter. The ware made was mainly of a very coarse description, the material being the ordinary marl of the district, and such articles as *butter pots*, for the farmers to carry their butter to the markets for sale; *Tygs*, many-handled mugs for passing from mouth to mouth in the home as well as in the public-house; *Porringers*, in the centre of the table, to receive the contents of the stew pot, when each person took the fancied portion with the fingers. Individual plates, knives and forks and spoons were unknown in even such middle-class families as those of the farmers, potters, artisans and clerks. It was this state of things which must have set young Wedgwood thinking, and the serious outlook upon his everyday surroundings fostered in him the desire to improve that which must have been distasteful to a nature like his, so that his fertile brain was alert to every opportunity that presented itself to reform both the condition of the worker and the work.

Wedgwood had no special advantages; he was the thirteenth and last in the family. At fourteen years of age he was apprenticed for five years to his brother Thomas, to "learn his Art Mistery, Occupation, or Employment of Thrower and Handleing." But his position on the wheel did not last long, a former illness having left him with a knee affection. Compulsory rest and doctor's remedies were without avail, for at about 16 years of age he had to leave the bench altogether. This was a crisis in his career, a turning-point, and the necessity to leave the thrower's wheel and turn his attention to other branches of the manufacture led to the most important consequences. He was free to pursue discoveries and improve minor points of detail. He made the remainder of his apprenticeship a period of steady attention to duties before him, and of determinate self-culture. At this time he experimented with all the materials known to him, and persistently inquired for, and found, anything that promised success, so that he was able to produce new mixtures and clays, and succeeded in making excellent imitations of such natural bodies as porphyry, agate, marble and tortoiseshell. These he made into knife hafts, snuff-boxes, and other small articles for the hardwaremen of Birmingham and Sheffield. Towards the close of his apprenticeship he turned his attention to the ordinary cream-coloured ware. For half a century the potters of Staffordshire had been making experiments, with the result that a whiter ware than could be produced with the local marls was being made by Twyford and Astbury, as well as other potters, who had introduced this into their manufactures. The lecturer gave account of various partnerships into which Wedgwood entered, which carried on until 1759. At this period he entered into business as a manufacturer. He occupied the small Ivy House Works in Burslem at a rental of £10 per annum, and started humbly and modestly with a small capital upon his great career. His first productions were small ornamental goods. When he started, he made most of his models, prepared his own mixtures, superintended the firing of his ovens, was his own clerk and warehouseman. Ofttimes a great part of the night was spent in making chemical experiments, contriving tools and instruments for novel effects and processes, in sketching ornaments and patterns, thus preparing himself for the succeeding day.

It was because of the perfection of his improvement and invention that Wedgwood's cream colour ware inspired the other potters of Staffordshire to follow, and it soon became the product that was being called for by all. The dealers introduced it into the houses of the nobility, and in this way the attention of Queen Charlotte, wife of George III, was called to it. This led to a definite order for some of it for her own use, and as Wedgwood was the only potter who was willing to undertake so great a demand, the commission was placed in his hands. He supplied a tea service to St. James's Palace in 1765, and a full table service soon afterwards, which secured for him the title of "Potter to the Queen," and his new, delightfully potted, light-coloured, and well-glazed cream-colour received the name of "Queen's Ware," the shape being called the "Queen's pattern," which names were still used for this ware at the present time.

Orders now flowed in thick and fast, so that the Brick House Works became too small to cope with the demand, and Wedgwood purchased the Ridge House estate, where he built his new works, and a village to accommodate his workpeople, which he named "Etruria." Here they were to-day, enlarged and surrounded by a town which had claimed the country around and become part of the now important city of Stoke-on-Trent. The culminating point of honour for his "Queen's Ware" was the order placed by the Empress Catherine II of Russia, whose "service" for every purpose of the table consisted of 952 pieces, each piece having a different British landscape painted upon it. For this Wedgwood searched the country for artists and subjects, and succeeded in making this service a national work. Its fame was European. It was completed in 1774, after 14 months' work upon it by "all available hands," and was for two months on show in the rooms at Greek-street, Soho, where all London flocked to see it. Many failures are recorded, and difficulties at times seemed to overwhelm him, but by a persistent, untiring course of careful and elaborate experiment, Wedgwood was able to bring to perfection many of his cherished schemes.

All these experiments were made with the materials known to the earlier potters, and his success with them led Wedgwood to the invention of his "Jasper body" with which his name is so completely connected; nothing like it had been seen before.

As an inventor Wedgwood occupied an important place. At a time when the pottery industry in Staffordshire was quickly developing and throwing off the lethargy which had prevented any material change for so long a period, this intelligent and industrious young potter had an open eye and mind for any improvement, and seemed to grasp at once any suggestion, however slight, upon which he could work. His start as a "master" potter was certainly due to the discoveries he had made, which resulted in the invention of new wares, as well as new tools for producing designs, and effects which were quite novel.

In May, 1782, Wedgwood communicated to the Royal Society his paper on the "Pyrometer," or heat-measuring instrument; two years later another paper was read, and in 1786 a third paper, so that his experiments extended over a period of six years. The subject was one which had in practice been before Wedgwood his whole life. His many improvements and discoveries in relation to clays, glazes and colours had depended upon certain degrees of heat, and therefore these papers were the embodiment of a long sequence of results, which led to observations of a highly scientific kind as to the relation of form to resistance to heat. The *colour test* depended upon individual experience and was too uncertain to serve any general purpose. It then occurred to Wedgwood that the contraction of bulk by the action of fire on clay bodies, which proceeded regularly as the heat increased, was a more certain method of measuring heat. Upon these deductions he made his pyrometer, and although it was admitted by scientific men, and by its inventor, to be an imperfect instrument, it had stood the test of 150 years and was still used at Etruria. As a result of these valuable labours, Wedgwood was elected a Fellow of the Royal Society in 1783, at the same time as Priestley. Apart from the untiring energy and persistent experimenting which Wedgwood displayed for the advancement of the pottery industry generally, by his inventions his activities in other directions showed his unfailing exertions to improve the conditions under which he and the other potters had to work. It was he who opened a subscription list with a gift of £20, which was a considerable amount in those days, so that they were able to build the first school in Burslem. It was he who roused his neighbours, and he and they besought the "powers" of that day to better the condition of transport, and urged them to continue the turnpike roads, which were 20 miles away, through "The Potteries."

The bicentenary of the birth of Wedgwood, said the lecturer, had arrived, and it was fitting that the whole industry should halt at the milestone reached and look back with thankfulness upon the difficult road by which progress had been made, but let us fully realise that milestones were not placed on the road for sitting upon; their chief use was to show how far we had still to go.

Plan to Remodel Athens.

The municipality of Athens, it is reported, has developed a plan by which the city is to be remodelled and redecorated in such a way as to give it the aspect of a full-fledged modern city. To achieve this end, two elements are lacking: an abundant water supply, and a system of sewers. However, due to the enterprise of American capital, the former question is near its solution, and the latter is being considered. A comprehensive draining plan for Athens and the Piræus has been arranged in accordance with scientific data. The complete network of sewers will embrace all the streets, and will require ten years to construct. The outlay is estimated at about £4,200,000.

LEGAL SECTION

NOTES ON CURRENT CASES

RENT RESTRICTION : INTESTACY OF STATUTORY TENANT.

In a recent action brought in the High Court (Price *v.* Gould and Others; *The Times*, May 8), the question was raised : What was intended in section 12, sub-section (1) (*g*), of the principal Rent Act of 1920 by the expression " member of the tenant's family," as there is no definition of members of the family in the Rent Acts, as there is in the Workmen's Compensation Act.

The material part of paragraph (*g*) provides that the expression " tenant " includes " the widow of a tenant dying intestate who was residing with him at the time of his death, or where a tenant dying intestate leaves no widow, or is a woman, such member of the tenant's family so residing as aforesaid as may be decided, in default of agreement, by the County Court."

The plaintiff in this action was a Miss Price, who in 1915 had acquired a long lease of a dwelling-house which in 1916 she had sublet to a Miss A. Gould on a seven-years' tenancy at a rent of £45 per annum, subsequently increased to £60 15s.

When the term of this sub-tenancy had expired in 1923, Miss A. Gould continued in possession as a statutory tenant. On November 20, 1929, Miss A. Gould died intestate, and apparently at that time two sisters and a brother were residing in the house with her, and in the action by the plaintiff for possession these defendants relied upon the above paragraph, having by agreement decided that one of the sisters of the deceased was, if the defence succeeded, to be treated as " the tenant " under the paragraph and a statutory tenant.

It was contended on behalf of the plaintiff that only a husband, wife and children were members of the family within section 12 of the principal Act, and that brothers and sisters were excluded, and a number of equity cases were cited to show that the word " Family " was not a technical term, but a popular loose and flexible expression depending upon the context of the will, settlement or statute in which it was used.

The Court held that in the sub-section under consideration it included brothers and sisters, being assisted in this conclusion by the case Salter *v.* Lask (1925, 1 K.B. 584), in which it was held that a husband was a member of the wife's family, she having died intestate.

This finding, however, did not conclude the case, as the plaintiff had claimed that she, as landlord, required the premises for her own occupation as a residence. This raised a point it is well to draw attention to, because it involves the consideration of an Act that is apt to be overlooked, as it is not entitled a Rent Restriction Act, but the Prevention of Eviction Act, 1924.

In the Rent Act, 1923, by section 4, a new code was introduced dealing with " Restriction on the right to possession " which was to be substituted for section 5 of the principal Act of 1920, and in that substituted section there were five paragraphs dealing with cases where the condition as to the existence of alternative accommodation should not be a condition of an order or judgment on any of the grounds specified in paragraph (*d*) of the substituted section, that paragraph dealing with cases where the dwelling-house was required by the landlord for his own occupation, or for that of sons and daughters, or for certain persons in his employ, irrespective of the date at which he became landlord.

Paragraphs (iv) and (v) dealt with cases where the premises were required by the landlord or the husband or wife of the landlord as a residence for themselves, or for sons and daughters over 18 years of age, differentiating the case according to the dates at which they had first become landlords. If they had become landlords before June 30, 1922, they were absolutely entitled to possession under paragraph (iv), but if after that date, only if the Court was satisfied that greater hardship would be caused by refusing to grant an order for possession than by granting it. In other cases alternative accommodation would have to be proved available under paragraph (*d*). By section 1 of the Prevention of Eviction Act, 1924, paragraphs (iv) and (v) were repealed, and a new paragraph, numbered (iv), was substituted for them. This new paragraph omits any mention of the husband or wife of the landlord, and it applies to persons who have become landlords before May 5, 1924, and under it the Court has to be satisfied, having regard to all the circumstances of the case, including any alternative accommodation available, that greater hardship would be caused by refusing to grant an order or judgment for possession than by granting it. Thus the element of alternative accommodation is reintroduced, but not in such absolute terms as in paragraph (*d*), where the Court has to be satisfied that alternative accommodation is actually available.

In the report of the case under consideration no particulars are given as regards alternative accommodation, but the Court held, having regard to all the circumstances of the case, that the balance of hardship would rest with the plaintiff if the order for possession was refused, and judgment was given for the plaintiff, but without costs, as the case was one which could have been brought in the County Court.

ASSESSMENTS FOR INCOME TAX OF SELF-CONTAINED FLATS.

A CASE reported in *The Times*, May 8—Inspector of Taxes *v.* Improved Industrial Dwellings Company, Ltd.—appears to raise some interesting questions on the assessment of self-contained flats for income tax, especially as the case related to flats erected for the housing of the working classes.

Morrison-buildings, in Whitechapel, was a block of artisan dwellings approached by passages direct from the street as regards the ground-floor flats, and by two flights of stairs as regards the upper flats. The passages on the ground floor had no doors, and there was no door at the foot of the staircases, and the flats opened on to these and other upstair passages, each flat having its own front door, and there being no communication between the flats except the passages on which their front doors opened.

These flats had been assessed under the Valuation (Metropolis) Act, 1869, in the valuation list for 1925 as separate flats by the Stepney Borough Council without objection or appeal by the inspector of taxes, and the gross values of the respective flats as several hereditaments were not liable to be assessed again for rating purposes until the end of the quinquennial period in 1930.

For the purposes of income tax under Schedule A of the Income Tax Act, 1918, they had been assessed under Schedule A, Part VII, Rule 8 (*c*) of that Act in blocks or groups—that is to say, the separate assessments made on the individual flats in each block had been added together and each block assessed on that basis, so that no alteration had, in fact, been made in the assessment of each flat, but the unit was different. Apart from legal technicalities, the main objections raised by the owners as to this were (1) that the allowances under Schedule A, Part V, Rule 7, as amended by the Finance Act, 1923, section 28, would be on a lower scale than if each flat was separately assessed; and (2) that no claim could be made for voids of one or more individual flats, as the whole block must be unoccupied.

The legal contentions on behalf of the Company appear to have been (1) that each flat was both in fact and in law a separate house for all the purposes of the Income Tax Acts; that Rule 8 (*c*), in Part VII of the Act of 1918, had no application; and (2) that the properties being in the administrative county of London, the valuation list was conclusive for the purposes of the Income Tax Acts (see section 45 of the Valuation (Metropolis) Act, 1869); that the valuation in groups involved an alteration in the valuation list and the gross values and classes thereunder, and that the assessment by groups pursuant to Rule 8 was a rule relating to valuation, and by the first paragraph of the Income Tax Act, 1918, Schedule A, nothing in the rules was to affect valuations of lands and hereditaments. The Commissioners had held that the gross assessments were conclusive under the Valuation (Metropolis) Act, 1869, during the quinquennial period, and that Rule 8 (*c*) was a rule relating to valuation and was excluded; but they intimated that if this finding was wrong, and the flats could be reassessed during the quinquennial period, then the flats should be assessed together in blocks under Rule 8.

The Court appears to have held that as the values as assessed under the Valuation (Metropolis) Act had not been altered at all, but had simply been added together under Rule 8 (*c*) of Part VII of the Act of 1918, in pursuance of sub-paragraph (*c*), which directs that any house or building let in different apartments or tenements, and occupied by two or more persons severally, shall be assessed and charged as one entire house or tenement, the assessment and charge being made upon the landlord, the objection of the owners could not be upheld. The Court also held that Rule 8 was not a rule affecting valuation or " which related to the ascertainment of value " within the meaning of the first paragraph of Schedule A of the Act of 1918, but dealt only with the aggregation of assessments."

We may notice in passing that this paragraph provides that nothing in these rules shall affect the valuation of lands, etc., within the administrative county of London, with respect to which the valuation list under the Valuation (Metropolis) Act, 1869, is by that Act made conclusive for the purposes of income tax, and then goes on also to exclude certain of the rules in Schedule A in particular, as well as " any other rule which relates to the ascertainment of the value of such lands, etc.," in the administrative county of London; but Rule 8 is not amongst those thus specially excluded from operating in that area, and this appears to support the finding of the Court.

One other point was raised in the case, for it was argued for the owners that even if Rule 8 applied, yet the assessment was wrong, as there was no " house or building let as tenements," but a number of self-contained tenements reached by common staircases and passages not having doors to the street; but the Court said that this argument was not sound, for the main walls and roof included the several tenements, and there was one building in the same ownership.

This case, and another heard at the same time, are at present only briefly reported, and no comment is possible except this—that at a time when the Government is desirous of fostering the erection of working-class dwellings, and the public is called upon to pay subsidies to attain this end, it seems curious that the Revenue authorities should take proceedings of this nature to attain the result of limiting the allowances which would be secured were the tenements treated as separate hereditaments.

THE WEEK IN PARLIAMENT

WESTMINSTER, *Wednesday.*

Slum Clearance Bill.

STANDING Committee "A" of the House of Commons last week considered Clause 2 of the Housing (No. 2) Bill, which provides for the clearance of slum areas. The Clause deals with the procedure to be adopted for securing the clearance of slum areas.

Mr. Womersley moved an amendment extending the period allowed for the demolition of a building from six weeks to three calendar months.

Mr. Greenwood said he could not accept that amendment, but he was willing to accept another allowing six weeks, "or such longer time as in the circumstances the local authority might deem advisable." This amendment was agreed to.

Mr. Greenwood moved a new sub-section providing that no land to which a clearance order applied should be used for building purposes, or otherwise developed, except subject to such restrictions and conditions as the local authority might think fit to impose, any aggrieved owner having the right to appeal to the Minister.

Mr. Harris moved an amendment to this to enable a local authority to call on the owner of slum property to contribute to the cost of re-housing. He mentioned that the amendment had been drafted by a sub-committee of the London County Council.

Mr. Greenwood, however, did not think it fair to place all the responsibility for slum conditions on the slum landlords, and the amendment was negatived. Mr. Greenwood's proposal was agreed to, and Clause 2, as amended, was agreed to. Clauses 3 and 4 were also carried.

Clause 5 provides that where a local authority is satisfied that the housing conditions in any area are dangerous, or injurious to the health of the inhabitants, it may declare the area to be an improvement area, with a view to the demolition or repair of such dwelling-houses as are unfit for human habitation, the purchase of land for opening out the area, and the abatement of overcrowding.

Sir Philip Pilditch moved an amendment to enable a local authority to deal with an improvement area by "the purchase of such dwelling-houses, or other buildings, in the area as can with advantage be repaired, altered, added to, or provided with better sanitation by the authority in order to facilitate the proper carrying out of the improvement." He explained that his object was to allow improvement schemes to be utilised to the full as valuable adjuncts to clearance schemes. The amendment would make it possible, by the reconditioning of unsatisfactory dwellings, for people who would otherwise be displaced, to remain in the area and among their friends. It would, of course, be necessary for local authorities to receive financial assistance from the Exchequer towards cost of reconditioning.

Mr. Greenwood said he was not willing to encourage local authorities to become the owners on a large scale of semi-derelict cottages. It was the business of the landlord to keep his property in a proper state of repair, and the amendment would be too costly to operate to make it of any value.

Despite strong Unionist support, the amendment was negatived by 20 votes to 17.

Clause 5 was then agreed to.

Charing Cross Bridge.

Sir B. Eyres-Monsell asked if Mr. Morrison was aware that, however much one might wish for this bridge, to recommend the House of Commons to overthrow one of its Committees was a very grave constitutional precedent. He hoped the Government would take that into consideration.

Mr. Morrison said that had been taken into account, but the fact could not be ignored, particularly by members of the late Government, that what the London County Council had done in connection with the Charing Cross Bridge Bill and the Waterloo Bridge Bill was at the request of the late Government. The present Government had continued the policy of the late Government on that matter. The Government did not feel that they were entitled lightly to throw an arrangement aside in that way without giving the House of Commons an opportunity further to express its opinion.

Sir A. Chamberlain asked what exactly was the motion which the Premier proposed to make in respect of the Charing Cross Bridge Bill? To what Committee did he propose to recommit it?

Mr. Morrison said that Sir A. Chamberlain was under a misapprehension. There was no intention on the part of the Government to bring forward a motion for recommittal. His answer stated that in the event of the L.C.C. deciding to ask for the recommittal of the Bill, they would make the recommittal motion in order that Parliament might have a further opportunity of expressing its views. The Government, while leaving the matter to a free vote, would advise the House to adopt that course. The question as to which Committee the Bill would be referred to was entirely premature at this stage. No doubt the L.C.C. would have to be influenced in its consideration as to the chances of success by the attitude of members of the Opposition, who urged the Council to go into this policy when they were a Government, as well as by the attitude of His Majesty's Government.

Sir A. Chamberlain said he was concerned with the constitutional practice of the House of Commons and the responsibility they had to their Committees. Might he take it that the Government had undertaken to support the motion, if made, and that the Bill would be recommitted to a Committee which could hear evidence, as the previous Committee did?

Mr. Morrison replied that, clearly, that would have to be the case.

The Subsidy.

Mr. Freeman asked the Minister of Health the capital value of the Exchequer subsidy per house under the Wheatley and Chamberlain Acts and under the proposed Slum Clearance Bill.

Mr. Greenwood said that the capital values were approximately as follow:—

	£
£4 for 20 years under the 1923 Act	50
£7 10s. for 40 years under the 1924 Act	129
£2 5s. per person for 40 years proposed under the present Bill on the basis of 5 persons to a house on average	193

Repairs to Houses of Parliament.

Mr. Lansbury stated that, in regard to the repair of the stonework of the Houses of Parliament, the total expenditure up to March 31 last on this service amounted to £61,475, of which £26,896 was expended during the financial year ended on that date. The estimated expenditure for the present financial year was £31,200.

INQUIRY BUREAU

Nuisance under Public Health Act.

[REPLY TO "CONRAD 500," MAY 23.]

SIR,—Under the Public Health (London) Act, 1891, it is clear that a complaint of a nuisance need not be in writing. "Information" only need be given to the sanitary authority concerned, and that may be oral, though, of course, it is better, for obvious reasons, that it be in writing. However the information is given of the existence of a nuisance, the sanitary authority must be satisfied of its existence, and no more. Nothing is laid down as to what information is required, but here, again, the information should clearly give the nature and extent of the complaint, and, if it is in writing, no member of the public is entitled to inspect the document. The information is for the local authority alone, and if the authority is satisfied, it must serve a notice on the person by whose act, default or sufferance the nuisance arises; or, if such person cannot be found, then on the occupier or owner of the premises on which the nuisance arises requiring him to abate the same. If the sanitary authority does not act, the matter can be brought to the notice of the Ministry of Health.

PUBLIC HEALTH.

Reflection Trouble in Showrooms.

SIR,—I am interested in a motor garage, and have just completed a showroom with plate-glass windows facing east. Internally the walls are distempered buff, and all that can be seen is the property on the opposite side of the road and traffic passing. Could any of your readers help me out of the difficulty and suggest any means whereby the cars on display can be clearly seen?

W. HUDSON.

Concrete Joists.

[REPLY TO "T. H.," MAY 23.]

SIR,—I agree entirely with your editorial note upon the above query, and I would suggest that your correspondent consult a specialist to consider whether a better way of meeting the structural problem would not be by means of a concrete raft over the whole of the site where on made ground.

ARCHITECT.

Filtering Sewage.

[REPLY TO "SANITARY," MAY 16.]

SIR,—"Sanitary" might verify the construction of his sewage system before condemning the material of the filter beds. The outlet of the filter must be at the bottom thereof, otherwise part of the filter will stand permanently in water, and will become foul.

SANITATION.

Fireproofing Thatch.

SIR,—I understand there are methods of rendering thatch (either reed or straw) at least partly fireproof. I wonder if any of your readers could give me any information on this point.

THATCH.

Date of Chimney Pot.

SIR,—A red chimney pot recently removed from an old house is stamped "G. Randall, Bagnigge Wells." Can you tell me where this pot was made? I am anxious, also, to verify approximate date of manufacture.

W. G. CROSS, Borough Engineer, Acton.

P.C. Sums.

[REPLY TO "FAIRPLAY," MAY 23.]

SIR,—The p.c. sums in question definitely mention the fittings—hence my query. I had to accept "all responsibility for getting the work done" by virtue of signing the R.I.B.A. form of contract, which, together with the usual "preliminaries" to the bill of quantities, imply or make the responsibility of getting the work done the contractor's. I should have liked to know "Fairplay's" point of view on people outside the trade taking the builder's discount. This is a subject which needs ventilating owing to the growing prevalence of the practice. Of course they do not always get it, but some merchants of a "hungry" disposition give it. I have also experience of the discount being taken by the architect who has paid for articles himself. In such cases the builder has been paid only for fixing; indeed, this is all he has been asked to do. It does not seem good enough for me, and in two proven cases I now decline to carry out work under the architects concerned, and have struck the merchants who supplied the goods off my list.

SQUARE DEAL.

Regulations of Advertisement Boards.

SIR,—A county authority has given notice under the Advertisements Regulation Act of 1925 to remove a notice-board about 4 ft. square from the side of a by-pass road. The advertisement is advertising and giving direction to a hotel lying off the road. Has the authority power to deal with a notice board this size? It does not obstruct any view and is not in a village. Does the Act apply to a notice lettered on the wall of a cottage? If notice lettered on the wall of a cottage? If

R. M.

THE BUILDING TRADE

USE AND ABUSE OF BUILDING MATERIALS

By A. M. GILES, B.Sc., A.I.Struct.E., A.M.I.E.E.

XXII.—CEMENT (*Continued*).

There still remain many points of importance to users of cement. Though it is not possible to go very much into detail, nevertheless some of those outstanding may be of considerable help.

Storage.

Cement, particularly the more modern very finely-ground variety, can be described as almost greedy where water is concerned. It will eagerly absorb or combine with the water or water moisture contained in anything with which it comes into contact. Since the atmosphere always contains moisture—sometimes more, sometimes less—it can be seen how very necessary it is, when storing cement for any length of time, to keep it properly confined in air-tight compartments. Covering sacks of cement by a tarpaulin, as is frequently done, is only sufficient as a temporary measure.

It is said that the absorption of 1 or 2 per cent. has little or no damaging effect, but, should the absorption be in excess of this amount, then not only will the setting or hardening be delayed, but also, what is of more importance, its final strength will be reduced. Further, should the absorption be 5 per cent. or over then, for all ordinary purposes, the cement is practically useless. This feature, therefore, is an important consideration to small builders and others, who are unable to use up even the smallest amount that they can buy within a month or five weeks. Their loss, because of inefficient storage, may be fairly considerable. To cope with this, adequate storage must be provided. It is not sufficient to arrange for the floor, walls, and roof to be damp-proof, particularly if the doors are likely to be very much opened and shut thus allowing frequent changes of air, or the introduction of fresh air containing more moisture. The building must be air-tight.

If it is found that a quantity of stored cement has become lumpy, or air-set, then the lumps can be removed by screening; if, however, they can be broken up quite easily with the fingers then they may be allowed to remain. Further, if it is intended to use this cement in any important work fresh tests of its setting and strength properties should first be carried out.

Cement manufacturers have found that the best way of storing cement is to keep it loose in bins to a depth of about 6 or 7 ft. It is said that by this method it can be kept for upwards of a year or even more without any actual damage taking place. A crust or coating about 2 inches thick forms on the surface and this protects the rest of the cement. Naturally, before using, this coating should be removed. Even when delivered in sacks, it is better for storage purposes that the cement should be emptied into bins, preferably with air-tight covers. Sacking material is a very good moisture absorbent and, therefore, will pass the moisture on to the cement. There is something to be said in favour of the use of paper bags in preference to sacks.

Much evidence is available for showing how the strength property of cement has deteriorated by being kept for any length of time in sacks in an ordinary shed, as is done by many building contractors. Figures have been given which show that, even after three months' such storage, there is a decrease of as much as 20 per cent. in the strength of the cement, while after two years the strength has decreased by more than half. It has been shown, however, that though there is a decided decrease in the strength of a concrete made with such cement, nevertheless there is an improvement with age, which goes to show that a cement which has been damaged by storage will take considerably longer in hardening than does a freshly manufactured one.

Strength Considerations.

It may be of both help and value to consider briefly some of the things that affect the strength of cement, or rather of a cement mortar made by mixing 1 of cement to 3 of sand. These have been hinted at previously and the results of many tests are of considerable interest. For example, there is the question of the fineness of grinding. This is of particular interest nowadays owing to the increasing use of rapid-hardening cements. It is now admitted that chemical action, involved in the setting, takes place much more rapidly with a very finely ground cement and, therefore, makes for rapid hardening. In all cases it is assumed that the cement is neither under— nor over—burnt, since it has been shown that with such cements the strengths are much below what they should be.

A cement mortar made with cement, 90 per cent. of which will pass through a "200" sieve, has a compressive strength approximately three times as great as that obtained with a cement only 50 per cent. of which will pass a "200" sieve. The actual value at the end of six months in the first case was 4,400 lb. per sq. in., and in the second case just under 1,500 lb. per sq. in. It has been suggested that it might be a paying proposition for users of large quantities of cement to instal fine-grinding apparatus, since it is known that these finely ground cements will carry a much larger percentage of sand, and yet give the required strength values.

Aeration of cement is another point which has an important bearing upon the strength of cement mortar. The property of "soundness" should be the deciding factor. The British Engineering Standards specification says that, after 24 hours' aeration, the expansion measured by the Chatelier tongs must not exceed 10 millimetres. It does, however, suggest seven days' aeration if the first test is not satisfactory, but, at the same time, it reduces the allowable expansion to 5 millimetres. Experimental tests upon a cement mortar, 1 to 3, have shown that if aeration goes on beyond seven days, then both the tensile and compressive strengths deteriorate.

Again, there is much experimental evidence to show that the strength of a 1 to 3 cement mortar varies considerably with the percentage of mixing water. If too much or too little water be used, *i.e.*, if the mixes be too wet or too dry, it is found that the strength is less than that obtained with a mixture of medium stiffness. In one set of experiments, in which the amount of water ranged from 6 to 12 per cent., it was found that for a cement and sand briquette the 9 per cent. gauging water gave the best value after seven days, but, after 28 days, the best value was obtained when 10 per cent. was used.

Another point that is of interest, and one that has been demonstrated by a number of tests, is that the strength diminishes by as much as 50 per cent. if the briquette be removed, from immersion in water, for 24 hours before testing. If, however, it be left for 28 days after removal from water its strength value was practically the same as that obtained when the test was carried out immediately after removal. This would appear to endorse the views held by most workmen that mortar should not be allowed to dry too quickly.

Water-proofing.

This is a subject that is constantly engaging the attention of the builder, as well as the scientific expert. Many proprietary articles are obtainable and, in the main, they all claim to produce real water-proofing, or at least an almost negligible consideration in the matter of porosity. This, of course, in a way, is closely connected with the permeability of cement or concrete. The object naturally seems to be to obtain a mixture, whether cement mortar or concrete, that will withstand the inroads of water for long or short periods.

Very extensive experimental evidence is available, and it is interesting to note that there is no general agreement in favour of any standard method of procedure for producing the required results. It seems that even now the action that takes place between the water and the cement grains is not fully appreciated. An explanation that is frequently given is that the water enters into chemical combination with the constituent parts of the cement grains and hydration takes place, *i.e.*, hydrates of alumina, silica, and lime are formed. Some of these hydrated compounds are crystalline and some are colloidal. A colloidal compound is in nature something like glue. One of the crystalline forms is the hydrate of lime, and this is soluble in water and, as the outside surface of the mortar or concrete dries, this solution, by capillary action, finds its way to the surface, and there is acted on by the carbon dioxide of the atmosphere to form an insoluble stopping to the surface pores.

It takes a long time for this effect to be produced, but it has been shown that, when once this stage is reached, the resistance to water is almost, if not quite, as effective as that produced by any waterproofing materials. That the effect is superficial to the extent, say, of from one-sixteenth to one-eighth of an inch, has been shown by comparing the absorption of water by a block of cement placed upon a surface of wet sand before and after its contact face has been filed off to a depth of about one-eighth of an inch. Before removing it, the absorption was negligible—tested by weighing it—whereas, after removing it, the absorption was as much as 8 to 10 per cent. Further, on the other surfaces of the block there was no appearance of damp, which seems to show that they were more or less impervious.

It seems, however, quite reasonable that a cement mortar which has been treated with some water-proofing material will not only not absorb moisture from the outside to the same extent, but neither will it allow the mortar to dry out as quickly, and this is sometimes given as a reason why the strength in the early stages is somewhat greater as a result of such treatment.

The question of water and cement, or rather the penetration or permeation of cement by water, has been of particular interest to the writer, who for some time was responsible for the construction of water-catchments, as well as tanks, both large and small, for storage of the water; also the treatment of the roofs of buildings where slates or tiles were not available, and slabs of a particularly porous limestone were used instead.

In these days of the increasing use of rapid-hardening cements, one, at present, has not yet heard much of their water or rain-resisting qualities. More experimental evidence will probably very soon be forthcoming.

A number of other really important details in connection with the uses of cement come to mind. It is, however, only possible to refer to some of them. Many, such as the number of ways in which cement may be used as a most efficient substitute for other materials in constructional work, also the number of useful facts and figures, as, for example, that architects and engineers

usually take a foot cube of cement to weigh 90 lb., and that, in the making of concrete, proportions are now specified by weight rather than by volumes, etc., which can be found in builders' pocket diaries or reference tables.

Other information upon such subjects as the effect of alkalis, oils, or paints upon cement; also the possibility of rendering cement acid-resisting; as well as the effect of temperature upon the final cement strength; and even a discussion upon pozzuolanas, must be left for the time being.

Of particular interest, however, is a cement which is being used much for flooring purposes. It is a magnesite cement. It is made by mixing magnesia and a strong solution of magnesium chloride. A hydrated oxychloride is formed. It is one of the strongest cements known, and, when mixed with about four parts of sea sand, will yield a material whose crushing stress is about 8,000 lb. per sq. in.

INTERNATIONAL FEDERATION OF BUILDING AND PUBLIC WORKS

THE Fifth International Congress of Building and Public Works, organised by the National Federation of Building Trades Employers and the Federation of Civil Engineering Contractors of Great Britain, on behalf of the International Federation of Building and Public Works, was opened at Central Hall, Westminster, on Monday last. Mr. G. Mowlem Burt, the president, occupied the chair, and, in declaring the congress open, said their thanks would be due to many people by the end of the congress, first of whom would be the Secretary of State for Foreign Affairs, Mr. Arthur Henderson, for his assistance and sympathy. He regretted the absence of Mr. Henderson, but he was glad to say that Mr. Hugh Dalton, M.P., the Under Secretary of State for Foreign Affairs, had kindly consented to take his place.

Mr. Hugh Dalton, in welcoming the delegates, expressed to the congress a very warm welcome on behalf of the Government. There were, he was told, representatives of forty-one nations present, and he hoped that their deliberations this week on the important questions on the agenda would be productive of great good for all concerned. It was sometimes said that we in England were rather conservative with regard to building and public construction. Many men in other lands had struck out in new directions, and from them we could learn a great deal. Dr. Mendelsohn, he was glad to say, had been welcomed here as a pioneer of new construction, as also Messrs. Lussae and Grotius. There were in other countries new ideas coming forward which builders and architects here would study. At present we were suffering from trade depression and unemployment, but he thought the building industry would help to afford a solution, and he hoped that in the time to come there would be great activity in the building trade, which would be both a means of reducing unemployment, and would also assist in the construction of those houses which were so much needed.

The chairman, having thanked Mr. Hugh Dalton for his address, said it was a great honour, as president of the International Federation of Building and Public Works, to preside at that congress before such a brilliant gathering. The presence of eminent representatives from forty-one nations from all over the world manifested a widespread interest in these reunions and the great problems of the industry which required to be resolved on broad lines and in a modern and far-seeing spirit. Scientific methods tended to become more and more widespread nowadays, and the head of the modern concern must have knowledge of modern methods and be bold and up to date. When one considered the historic companies and guilds which regulated the industry in the past, it was apparent how employers and operatives had been accustomed to work together. Nowadays even closer collaboration was necessary between the architect, the engineer, the contractor, and the operative. The International Federation had helped in the direction of co-operation since its first meeting at Liege twenty-five years ago. He would mention Mr. Van Ophen particularly as having been the life and soul of the movement. Those delegates of affiliated federations represented 110,000 employers in Europe alone. As president of the English Committee of Organisation he extended to those foreign delegates the most cordial welcome to the capital of the British Empire.

M. Douane (president of the French Federation and vice-president of the Paris Chamber of Commerce), M. Cazianut (Swiss Federal Government), Mr. Sadoukas (Government of Greece), M. Michael Mann (Hungarian delegate), Dr. Gries (U.S.A.), Dr. Drach (Austrian Federation), Signor Roncorini (Italian delegation), Dr. Mast (German building trade), M. Josef Fiskao (Government of the Czecho-Slovakian Republic), Professor Lutken (Danish Government), Mr. Roberts (British delegation), Senor de Arruché (Spanish Government), M. Gerard (Belgian Federation), and M. Michels (Luxembourg), having spoken on behalf of their respective Governments or delegations, the Congress adjourned until the following day.

Scientific Research.

The third session of the Congress was opened on Tuesday by Lord Parmoor, P.C., K.C.V.O., K.C., Lord President of the Council, who, in the course of his address, said he was happy to see that the President was Mr. Mowlem Burt, a valued member of the board of expert advisers on the building research activities of the Department of Scientific and Industrial Research, over which he (the speaker) presided. The work of that department was rapidly developing. Not the least important part of it concerned the improvement and development of our knowledge of building materials and building methods. The choice of materials and methods had in the past been largely directed by tradition and experience. He asked everyone to make the fullest use of the knowledge and the facilities which were made available by that station, where they would always find a ready welcome.

During the discussion on scientific research, the chair was taken by General Cruikshank, who was responsible for preparing the British report on the subject.

Mr. A. Zaiman said that co-operation between the scientist and the practical man was essential for success in the building industry. He suggested that National Bureaux should be established, one in each country, to serve as a clearing house of information, to collect reports, to scrutinise information, and to make the results obtained by research available as rapidly as possible to those who could apply them readily. It was further suggested in the report that these National Bureaux should be internationally linked.

The interpreter having read a summary of the foreign papers on the subject,

Mr. A. P. Greensfelder (chairman of the Construction Development Committee, the Associated General Contractors of America) described the lines upon which they were working in America.

Herr M. L. Kauf (Germany) said, in a book on American standards which he had lately read, it was proved that the fireproofing of concrete was an absolute fallacy. It was also proved that the adherence of the concrete to the steel construction, instead of being an element of strength was an element of weakness. Buildings were fireproof only as long as there was no fire, and it was time that a method of avoiding such risks was found. Pumice was one of the oldest building materials known, and he had tried in Germany to get a good specification for pumice, and could get no satisfaction. It was in connection with such matters as that that scientific research was necessary. Germany had contributed five million marks to form a company called the German Empire Research Company which had gone to work on very scientific lines. They were building experimental estates in Germany containing as many as 3,600 dwellings, to be erected in accordance with designs by the best architects, and they would see how the building materials there used behaved..

M. Douane said he would like to tell the Congress what had been done by the French contractors in scientific research, without any help from the French Government, which, however, he regarded as necessary, and he thought there ought to be institutions for scientific research. There had been established three institutions, first the Union Technique, the purpose of which was explained in the introductory summary, secondly the Bureau for Hygiene and Safety on the Works, and thirdly a Bureau called Securitas, composed of the most eminent French scientists, who made a study of the liability of French contractors, which, according to French law, lasted for ten years.

Dr. Stradling, the Director of the Building Research Station at Watford, said if they could spare time to go out to the research station at Watford he would be very delighted to meet them and to exchange ideas.

M. Cazianut said that they had an advisory body in Switzerland with a view to avoiding accidents, and from that body they had obtained excellent results.

Sir Ernest Moir said a useful field of research was the destruction by the white ant of timber. He also mentioned how he cured by re-immersion a disease known as "The bends," or caisson disease, when he was constructing the first Hudson tunnel.

General Cruikshank, winding up the discussion, said it might not be too much to suggest that where research did not already exist industries should group together to establish research centres on the principle that progress which would be of advantage to anyone would materially benefit the whole group. Much depended also on adequate facilities for education. One point had emerged from the discussion which he thought should be formally recorded as the result of their deliberations, and that was a resolution proposing the creation of International Bureaux of Building Research which would pool information received. That proposal seemed to receive general approval, and accordingly he took the liberty of moving it from the chair.

The President (Mr. G. Mowlem Burt) proposed a vote of thanks to General Cruikshank for presiding at the session on the question of Scientific Research.

Conditions of Contract.

Mr. Davies prefaced the presentation of the summaries by saying that though the reports received showed that a measure of agreement had been achieved between contractors and architects in this matter, there was still a good deal left to be done.

Mr. Radzimar Pietkowsky (Poland) said that if some particular conditions were lacking from a contract, the contractors' civil rights came into force, but in most cases the contractor was forced to give up some of those rights, and he thought that those civil rights should not be diminished by the wording of the contract.

Senor Masso (Spain) submitted four suggestions to the Congress for its consideration, dealing (1) with the eligibility of contractors to tender, (2) with the security for the performance for the contract, (3) with arbitration instead of litigation in the case of Government contracts, and (4) with the acceptance of an average tender instead of, as was so often the case, the lowest tender.

Signor Roncorini (Italy) read a paper on the position of the contractor in modern economy.

M. Cazianut (Switzerland) told the Congress that the Congress of Paris had already decided that the main legal point to be considered was that the same rights ought to be conferred on the contractor as on the building owner. The English report had gone further than that, and he hoped that the question would be referred to the Superior Council in order that principles might be established which would serve as a guide to the National Federations of the different countries.

Mr. Kenneth Thomas said one thing which was striking in all the reports was the universal desire for standardisation in the form of the contract. A standard contract would prevent a contractor having to cover risks which he ought not to be expected to undertake.

Mr. Van Ophen said in dealing with standardisation of conditions, he thought one should not think so much of the drafting of the conditions as of certain basic principles on which everyone would agree, such questions as the conditions of payment, the guarantees and securities which should be given by the contractor, penalties, overtime work, arbitration, and very many other questions, some of which were really mature for general agreement and ought to be incorporated in any resolution which the Congress adopted.

Rationalisation.

Mr. Mowlem Burt, in opening the first business session of the congress on Tuesday, introduced as chairman, while the subject of "Rationalisation" was under consideration, Lord Amulree. He then called upon the Rt. Hon. J. H. Thomas, the Lord Privy Seal, to address the congress.

Mr. Thomas said the building industry was the second largest industry in this country, second only to agriculture, which, in spite of all its difficulties, still offered the greatest volume of employment to our people; but the building industry was a tremendous factor in the health and prosperity of the nation. Some people assumed, he continued, that rationalisation meant the amalgamation of a few firms, but that was an absurd view of the situation. If rationalisation was to succeed, it could only succeed by making the industry more efficient—in short, by the elimination of waste. It was always assumed that reducing cost meant reducing wages. That was an entirely wrong conception of the real intention of rationalisation, as anything which tended to reduce waste must ultimately be to the benefit of the community. He realised that rationalisation would mean a temporary increase of his particular difficulty—the unemployment problem—but whatever the temporary reactions might be, the future of the country was far more important. Those present also must realise that rationalisation would mean that large amounts of capital in concerns which were over-capitalised would have to face the consequences which must ensue.

Mr. Mowlem Burt said he thought that the reports which had been received from the various countries on rationalisation showed that the industry did not look on rationalisation as meaning merely financial mergers, but as something which must be worked out in the way indicated by Mr. Thomas. So far as Mr. Thomas personally was concerned, few who knew him and his work would not be prepared and feel it a privilege to co-operate with him in any movement which his judgment indicated as likely to benefit industry and increase employment.

Mr. Jones, secretary of the section, then read summaries of reports on rationalisation. In the discussion following,

Mr. Gerrard called attention to the delay which occurred in building operations, and gave an instance from Manchester of the effect on speeding-up which resulted from a weekly conference between the architect, the contractor, and the owner.

Mr. Thorne said that his experience had been that the more the workers were shown what the intention of the contractor was, the more intelligent an interest they took in the work. He always exhibited on the work a plan of the building.

M. Cazianut put forward a point on the question of hours, and said that the question as it affected the building industry was essentially different from its effect in other industries: it should be thoroughly discussed as regards its influence on efficiency in construction.

Mr. Milward, speaking on behalf of the International Management Institute, laid stress on the importance of the building industry studying the business methods of other industries in this and other countries. He cordially invited any members of the Congress to communicate with his Institute.

M. Douane agreed with the Swiss delegate on the great drawback which the hours of employment were to the industry, and submitted that the situation might be met to some extent by piecework, suggesting that the Congress might go into the question and discuss the effects which had been obtained in other countries in this direction.

Lord Amulree, in summing-up the discussion, said one trouble in England was the effect on the industry of local by-laws and local building Acts, many of which had come into force as long as fifty years ago, since when the building industry had been almost revolutionised; therefore, one of the objects of rationalisation must be to get our by-laws and statutes brought up to date. Another thing which might be considered was some means whereby the booms and depressions which had been experienced periodically for the last 150 years might be obviated, and that could only be effected by a far-sighted policy on the part of the contractors, the leading industrials and the municipalities. It had been suggested that if rationalisation were introduced in industry, there would be certain temporary reactions. He did not think so; he did not think that in the case of the building industry there would be any reaction at all in the sense of unemployment or the reduction of orders. Another great factor was the standardisation of commodities—mass production, which would stimulate contracts and result in less expensive production.

Development of the Co-operative Spirit in Industry.

Mr. Mowlem Burt said that an interesting paper had been written by Mr. Kohn, of America, and asked that a member of the American delegation should deal with the subject.

Mr. Morgan expressed his regret at the absence of Mr. Kohn, and gave an account of the success which had attended their efforts in New York, both in their relations with labour and in forming a new Code regulating the building industry, which it was estimated would effect a saving of 150 million dollars annually through the removal of building restrictions.

Financial and Credit Facilities.

Mr. Cannon read a summary of the Report from Great Britain.

Mr. M. Mann said this subject fell into three headings, (1) Mortgage credits, which depended upon the international financial situation; (2) financial assistance to be given by the State, the most effective means under this head being for the State to grant to builders cheap long-term second mortgage credits or to guarantee annuities payable on such loans; and (3) other assistance to be given by authorities, that is to say, exemption from taxation for longer periods, etc.

M. Douane thought the matter could be divided into two parts, firstly, a credit to the building owner, and secondly, a credit to the contractor during erection, and explained the system in operation in France. M. Gazioni supported M. Douane, but said that in Switzerland they were fairly satisfied with the legal position as it stood, but suggested that in that country sufficient advantage was not taken by the contractors of the protection given by law.

NEW CINEMAS

Barnstaple.—A cinema, with a seating capacity of 1,400, is to be erected in Boutport-street, Barnstaple. A local company is being formed named the Savoy, Barnstaple, Ltd., with a capital of £20,000, and building operations will be started shortly. The Theatre Royal, at the other end of the same street, is being reconstructed and enlarged by the former lessees, Albany Ward Theatres, Ltd. (associated with P.C.T.), who have now purchased the property. The plans approved by the licensing justices provide seating capacity for about 1,200.

Birmingham.—The Public Entertainments Committee of Birmingham Justices has granted an application for provisional approval of a scheme for a new cinema at Stirchley. Mr. Joseph Cohen, the applicant, undertook to commence the building within three months and to carry out the work with due despatch. The site is at 1,182, Pershore-road, Stirchley, close to the Pineapple estate. The cinema will hold 1,988 persons.

Dundee.—At the upset price of £7,000 the premises known as Dickson's Garage, Clepington-road, Dundee, have been purchased by Mr. Charles Gray, builder and joiner, 9, Canning-street, Dundee. Mr. Gray is also a cinema proprietor, and it is his intention ultimately to use the site for a cinema.

Fulham-road.—The contract for the superstructure of the "Forum" Theatre, South Kensington, S.W., has been placed with Messrs. Bovis, Ltd., the foundations contract having been executed by Messrs. William F. Blay, Ltd. The architects are Messrs. J. Stanley Beard & Clare, F. and A.R.I.B.A., 101-3, Baker-street, W.1. When completed, this theatre will contain seating accommodation for 2,200 persons, with standing room for over 1,000.

Hanwell.—Mr. H. Goldblatt, proprietor of the Grand Theatre, proposes erecting a new cinema to seat 1,600 in The Broadway. Plans have been prepared by Mr. G. Bertram Carter, A.R.I.B.A., 14, Clifford's Inn, E.C.4.

Huddersfield.—The cinema at Thornton Lodge is to be entirely rebuilt and will reopen as the Plaza Cinema. The work is being commenced immediately.

Lewisham.—Messrs. Kirk and Kirk, of Putney, have secured the contract for alterations to the King's Hall Cinema, in High-road, for the owners, Messrs. Haase and Silverman. Plans were prepared by Mr. F. C. Mitchell, 80, George-street, Portman-square, W.1.

New Southgate.—Mr. Robert Cromie, F.R.I.B.A., of 35, Baker-street, W.1, has prepared plans for the erection of a new super cinema on a site in the High-road, at the corner of Upper Park-road. Mrs. May, of the Coronation Cinema, New Southgate, is concerned with the scheme.

Rhyl.—The Corporation has approved of the plans submitted by the Rhyl Entertainments Company for the erection of a cinema at the junction of High-street and Sussex-street.

Taunton.—Taunton Town Council has agreed to sell a site of an area of 2,039 square yards, which is at present occupied by a council medical clinic, to the Albany Ward circuit for the erection of a new cinema. The new house will be constructed on up-to-date lines, and the cost will be in the neighbourhood of £35,000.

Thorne Moorends.—Messrs. G. W. Lazenby and Co., Ltd., of Ferryhill, Co. Durham, have obtained a contract for the erection of a cinema theatre at Thorne Moorends, near Doncaster, for Moorends Empire, Ltd. Mr. W. Arthur Kellett, L.R.I.B.A., Lloyds Bank-chambers, Barnard Castle, is the architect. The amount of the contract, to exclude interior equipment, is £7,400.

Westbourne-grove.—Messrs. W. and E. Hunt are architects for the erection of an addition at rear of Grove Palace Cinema, Westbourne-grove, to abut upon Hereford-mews. Plans have been passed by the Paddington Borough Council.

BUILDING METHODS IN AMERICA

Mr. Alfred C. Bossom, F.R.I.B.A., in the course of a lecture on this subject, read before the Institute of Plumbers, said he presumed that the first and most important development that America had made in her building was the method of organising it. That was, one general organising firm undertook the work as contractors, and did little or no work themselves. They might do the rough carpentry; the rough excavating; the rough brickwork, and might have a certain number of men doing cutting and patching, but beyond this, and very often not even this, the general contractor did not go. He arranged the financing of the operations and organised them so that the material came at a certain time in the quantity needed. He knew in advance how many men he would need to do a certain amount of work, and to get this result the system of a progress schedule had been worked out with the very greatest accuracy.

About 45 per cent. of our entire building programme in England was undertaken either by the Government or the municipalities, and he believed he was right in saying that so far the Government had not adopted these progress schedules, and he knew of no municipality that had done it excepting West Ham in a very recent contract they had let. He hoped he was wrong in this and that a great many others were doing it, for, with the work definitely planned out in advance, they could see by their chart at a glance when their foundations must be finished; when their brickwork must be undertaken, and, in fact, going down trade by trade, how much material was needed at different times.

America had found essential a change of method that, he felt, would be a great advantage here. The architect gave practically complete information, not only plans and specifications, but details, often full-sized details as well, to the contractor when the contract was signed, so that everyone knew about what had got to be built right from the owner, architect, contractor, foreman and mechanic without making unnecessary inquiries and eliminating the greatest expense creator on a building, that was, costing work.

In America the plan had been developed of making every piece of work that could be done off the job to be so handled. All the stonework was finished away, brought to the job ready and erected. All the steelwork was done, so there was practically no field work at all undertaken upon it. All the plumbing and heating was by screw connections, the wiped joint being practically unknown in America, which meant the majority of plumbing and heating work was done either in the workshop of the plumbing sub-contractor, or one floor of the building was set aside for doing the minor work, and that floor was almost turned into a workshop. There were none of those contortionist conjuring tricks that were so frequently encountered in our plumbing work. Of course, the majority of building in America was done on a steel frame, upon which the entire structure hung, each floor of brickwork being a panel resting on its own girder and in no way supporting the floor above, merely being connected with it so as to form a weatherproof covering to the adjoining structure. A well-known contractor a little while ago had told him that in his opinion in a number of our contracts for brickwork, for instance, nearly 35 per cent. of this sub-contract was added by cutting and making good what had to be done to fit in the various pipes and connections after the brickwork was undertaken.

Methods of scaffolding and of hoisting material were carried out systematically outside the perimeter of the building itself. A framework consisting of pipes was erected so that the goods could be hoisted directly from the wagon and then carried in on small bridges from each floor into the building, so there was none of that patching and making good which used to be so common; this lift ended at a platform above the street in the usual way. The advantage of this was that when any sub-contractor delivered his goods they were carried on to this platform and then hoisted wherever required in the right volume and the right material.

We paid the one who handled this material on the lowest scale nearly for skilled workers on a building; in the States, however, the hoist man received the highest pay of practically any mechanic on the job and it was his skill that enabled the men to be properly fed with the material, not overcrowded and not kept waiting. The general contractor whom he referred to as organising the job in the beginning had on his staff a number of men who, from the progress schedule, saw that the steelwork or the stonework or the brickwork must arrive at the building on a special day, otherwise they would be delayed. What happened? These men went to the works where the material was being prepared and sent a report to the contractor every two weeks, as was common in many cases there, stating how the work was going on, and then saw it was loaded. They then did what was called "ride the cars"; that was, they rode with the material itself and when it got to a junction where it would be put on to a siding, they saw that their trucks were put on to a goods train so that the material arrived in time. Of course, the salaries of these men were not a continuous charge against the job, but for the time while they were working they were able to prevent delays for great gangs of workers, or disorganising of the work that otherwise was almost inevitable.

About every two weeks a meeting was held at which the architect and the contractor had their representatives, and every sub-contractor on the job went into conference, and the definite question was asked of everybody "Were they delayed, or were they ahead of time?" If they were delayed, why, and who was causing it? and the matter was thrashed out on the spot. In certain organisations a written report was required at least once a month from every sub-contractor, requesting him to state if he was on time according to the progress schedule that he had been given, and if not, who was delaying him. There was no doubt that this definite follow-up did more to save time and to reduce cost than practically anything else on the building.

As America had developed a steel-frame architecture, she had found it desirable to work out the heavy flange rolled section. A girder or a stanchion of the appropriate strength was practically always available without any addition of plates, angles, tees, etc., and all the hand work or fabrication that was needed was made in the connection of the horizontal to the vertical members. The advantage of this, of course, was obvious. It meant that steelwork went up at the rate of not less than four floors a week on the average building with perfect ease, and this speed was exceeded when it was desirable.

Brickwork was carried on on different floors so that the masons knew they would have a pretty straight-away run of work for several months, and the result was that in almost any building never less than two and usually three floors a week of brickwork were completed. They did not work any harder than our people; in fact, our people landing in America could take a job right away and without the slightest difficulty keep up if not exceed the speed of the average man there, but they got 3½ to 5 times the weekly wage they would earn in England.

There was not the custom in America of getting a large number of tenders as was common in England on a chance that someone might make a mistake with a low figure. In fact, it was the usual statement that if you could not get the right figure out of half-a-dozen responsible people, you could not get it from anybody, and the job ought to be modified to suit the money.

A tremendous overhead charge went on the building industry in England due to the cost of preparation of estimates both in the large number of sub-contractors and of general contractors which had got to be made, and we must never forget that in this system of rather promiscuous tendering the entire industry had to bear the expense; in other words, every job that was built had to carry the cost of a tremendous number of others that were not building. This was not a frequent practice in the States.

Another item that was entirely different from the English practice was the inclusion in large quantities of what were known here as the p.c. sums, which consisted of a figure obtained by the architect either from one contractor direct or from the result of invitations to a certain number to do such things as the steelwork, stonework, finished floors or plumbing, or lifts. An attempt was made in America to make the plans and specifications so complete that competition could be obtained on practically every item, and he thought it was safe to say that in the majority of buildings there was no item on which intensive competition was not introduced, particularly in commercial work.

Highly finished bronze work, electric light fittings that in the ordinary way were given out to one particular contractor were practically without exception given out as the result of competition, and this competition was directed by the contractor, not by the architect, it being felt that, due to his type of activity, the contractor was better equipped to get fairer and closer competition on such items than the architect might.

The total cost of two similar pieces of work in England and America was the same, but appropriate revision of the building codes so that materials were used in the most economical manner had enabled the ratio of the cost of material to the labour charge on a building to be reversed. In England we expended approximately 60 per cent. on material and 40 per cent. on labour, whereas in the States, where the materials cost approximately the same price per unit, 60 per cent. of the total cost was in labour and 40 per cent. only in material.

The building codes were revised with certain regularity. As new processes for perfecting the production of various materials were invented so they were frequently added and the codes amended, and every so often the entire code was rewritten with the objects, one, of bringing everything up to date, and, two, of reducing its bulk wherever possible and eliminating uncertainty.

Supervision by the municipality was put under one control, not, as we had it, under at least a dual or sometimes a triple control. Once the drawings had been approved by the building department of a city, then the work could be erected, and the building department's inspectors followed the work through, and not as in the case in England, where we had district surveyors who were in no way connected with such a body as, for instance, the L.C.C., having their very important bearing upon the methods that should be followed in the building construction.

The law of ancient lights, which was fruitful of one of the most successful crops of delays of building work in any congested area, was entirely eliminated. There was a standard zoning law which prescribed definitely what could be done on any piece of land, and equity was produced so that whether a person built to-day or built in five years' time, the law would apply, and it was not possible to get rights over other peoples' property, which unfortunately had grown to be a real thing with us to our detriment.

In the lower section of New York around Wall-street, the streets were as irregular and as congested as any part of England, and yet, once the architect was given the plan of the land, he knew exactly what he could put upon it without consultation with anybody. Yet, if they were given a piece of land in Threadneedle-street and told to build a bank on it, it might take 18 months, if they were not very careful, if it was desirable to get the full advantage and possibilities of their land.

Taken all in all, American methods had much to commend them to our consideration.

NEW BUILDINGS IN LONDON

Becontree.—HALL.—A mission hall is to be erected for the London City Mission, of 3, Bridewell-place, E.C.4, on the L.C.C. housing estate. Plans have been prepared by Mr. W. Alexander, Wellington-road, Hampton Hill, and the contract has been let to Messrs. F. D. Hidden and Co., Ltd., of Boston-road, Brentford.

Bromley.—PAVILION.—A sports pavilion is being erected for the Bromley and District Sports Club, Crown-lane, Bromley Common, by Messrs. Crossley & Son, building contractors, Bromley. Messrs. Waring & Nicholson, 38, Parliament-street, S.W.1, are the architects. The constructional steelwork is being supplied by Messrs. Young & Co., 6, Queen Anne's-gate, Westminster, S.W.1.

Canning Town.—OFFICES.—Messrs. J. H. Sankey and Son have under consideration the erection of an office building at Essex Wharf.

Colindale.—HOUSES.—Land has been acquired for the erection of 90 houses on the Woodland estate. The houses will cost about £900 each. Mr. Henry Lloyd, Dollis Park estate, Dollis Hill-lane, N.W.2, is the builder.

Croydon.—SCHOOLS.—The C.B. approved a site in Kensington-avenue for a secondary school and a new junior mixed and infants' school to accommodate 350 children be provided on that part of the site which abuts on Westminster-avenue, and further, that additional accommodation be provided for 150 children at the Norbury Manor junior mixed and infants' school.

Croydon. — SCHOOL. — The Croydon Council recommend, subject to the approval of the final plans by the B. of E., to the sanction of the M. of H., that the tender of Messrs. F. R. Hipperson & Sons, Broad-street-place, E.C.2, be accepted at £29,864 for the erection of Beulah School.

Dollis Park.—HOUSES.—Further land has been acquired for the erection of 125 houses and garages on the Dollis Park estate, N.W.2. Mr. Henry Lloyd is the builder.

Downham Park.—HALL.—Messrs. F. D. Hidden and Co., Ltd., of Boston-road, Brentford, have secured the contract for the erection of a mission hall upon an L.C.C. housing site, for the London City Mission, of 3, Bridewell-place, E.C.4. The architect is Mr. W. Alexander, Hampton Hill.

Ealing.—SCHOOL.—The council of the Girls' Public Day School Trust, Ltd., proposed removing to Ealing its Notting Hill and Bayswater High School, Norland-square, W. The council is to acquire Girton House School, Cleveland-road, West Ealing.

Ealing Common. — REBUILDING. — About £11,000 is to be spent by the Underground Railway Co. on the entire reconstruction of Ealing Common Station.

Garratt-lane. — FLATS. — The Wandsworth B.C. have approved plans prepared by Mr. G. L. Elkington, A.R.I.B.A., of Norfolk House, Laurence Pountney Hill, E.C.4, for the erection of 36 flats on the Garratt-lane site in one block of three stories in height.

Golders Green.—ADDITIONS.—A contract has been placed for the first portion of additions to the Manor House Hospital, North End-road, N.W.11. The successful tenderers were Messrs. Robertson and Cameron, 16, Addington-square, Camberwell, S.E.5. The architect is Mr. S. J. May, F.R.I.B.A., of 34-35, Southampton-street, Strand, W.C.2. The estimated cost of the work is £20,000.

Hampton.—HOUSES.—Messrs. R. Hewitt, Ltd., builders, of Cleveland-works, Acton Green, W.4, are erecting houses in Holly-lane and Broad-lane. The estate will have two new roads and about 88 houses will be put up. Plans have been prepared by the company's own architects.

Hayes.—ADDITIONS.—The tender of Mr. W. S. Try, of Cowley, Uxbridge, has been recommended for the erection of a new block for senior boys and girls at Townfield Council school for the Middlesex C.C. Their price is £32,409. The plans are by the County Architect, Mr. W. T. Curtis, F.R.I.B.A.

Hendon.—EXTENSIONS.—For extensions to the isolation hospital, comprising a new ward pavilion of 26 beds and extensions to the administration block, together with extensions to roads, paths, drainage, etc., the U.D.C. are inviting tenders. Mr. A O. Knight, M.C., M.I.C.E., Engineer and Surveyor to the Council, has prepared the plans.

Kennington.—FLATS.—Messrs. T. P. Bennett and Son, 41, Bedford-row, W.C.1, have prepared plans for a block of flats in Harleyford-road, S.E.11. Messrs. Willment Bros., Waterloo, S.E.1, have secured the contract for demolition work.

Kew.—EXTENSIONS.—Extensions are to be made to the Darell-road Council school. The architects are Messrs. Swan, Norman and Clay.

Lancaster-gate.—OFFICES.—Messrs. Bovis (1928), Ltd., 43, Upper Berkeley-street, W.1, have secured the contract for the conversion of Nos. 30-31 into offices for the Hospital Savings Association. Plans are by Mr. H. Victor Kerr, 22, Old-square, Lincoln's Inn, W.C.2.

Long Acre. — RECONSTRUCTION. — Messrs. Howard & Co., of Covent Garden, W.C., have obtained a contract for reconstruction of premises at 100, Long Acre, W.C.2, for Messrs. Dan Wuille.

Morden.—HALL.—The London City Mission, whose offices are at 3, Bridewell-place, E.C.4, propose erecting a mission hall on the L.C.C. estate. Plans for the work have been prepared by Mr. W. Alexander, and the contract has been secured by Messrs. S. D. Hidden and Co., Ltd.. Boston-road, Brentford.

New Bond-street. — RECONSTRUCTION. — Messrs. William Lowe, Castelnau Works, Barnes, S.W., have obtained a contract for reconstructing the premises at 107, New Bond-street, for Messrs. W. Froy & Sons, of Hammersmith, W.6.

Newington.—REBUILDING.—The "World Turned Upside Down" public-house, 145, Old Kent-road, S.E., is to be rebuilt by the owners, Messrs. Watney, Combe, Reid and Co., Ltd., brewers. Plans have been prepared by the company's architects.

Raynes Park.—FACTORY.—Messrs. Humphreys, Ltd., of Knightsbridge, S.W., have secured the contract for the erection of a large factory in Kingston by-pass road, for Messrs. Salmson. The architect is Mr. S. Gray, F.S.I., of Ealing. Sub-contract has been let to Messrs. Wilfrid Robbins, Ltd., Great Bridge, Staffs, for steelwork.

Wandsworth. — FLATS. — Sketch drawings have been prepared by Mr. R. Mountford Pigott, F.R.I.B.A., of 44, Bedford-row, W.C.1, for the erection of 51 flats in one block of three stories in height on the Fountain-road site for the Wandsworth B.C.

Wembley.—CHURCH.—The authorities of St. Michael's Church propose building a permanent church at £14,000. Plans are being prepared by Mr. Cyril Farey, A.R.I.B.A., Bedford-square, W.C.1.

Willesden.—EXTENSIONS. — Messrs. C. J. Newby & Bros., of Southgate, have been recommended for acceptance by the Middlesex C.C. for extensions to the County School. The County Architect is Mr. W. T. Curtis, F.R.I.B.A. The tender price is £32,998.

Woolwich.—FACTORY.—One-storied factory premises are shortly to be erected on the sites of Nos. 433 and 435, Woolwich-road. The contract has been secured by Messrs. J. Mowlem and Co., Ltd., Ebury Bridge-road, London, S.W. The estimated cost of the building is £11,000. Plans have been prepared by Messrs. G. Pearson and Son, of 212, Upper Thames-street, E.C.4.

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed, that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given is the latest date when the tender, or the names of those willing to submit tenders, may be sent in, the name and address at the end is the person from whom or place where quantities, forms of tender etc., may be obtained.

Following is a list of abbreviations:—Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor, D.S.; Clerk, C.; Town Clerk, T.C.; County Engineer, C.E.; County Surveyor, C.S.; County Architect, C.A.; Surveyor, S.; Engineer E.; Borough Architect, B.A.; Architect, A.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

JUNE 2.

Aberdeen.—Conveniences.—Also shelter and shop at Bridge of Dee, for T.C. T. F. Henderson, B.S. and Water Engineer.

Abergavenny.—Houses.—24 non-parlour and 20 parlour type, adoining Bailey-pk., for T.C. Wm. H. Hopwood, T.C.

Barry.—Houses.—50 semi-detached non-parlour type, fronting proposed new road on north side of Buttrills housing estate, and fronting Colcot-rd. and Barry-rd., for U.D.C. E. R. Hinchcliffe, architect. Dep. £2 2s.

Bourne.—Houses.—Eight, at Bourne and 4 at Dyke, for U.D.C. J. S. Fisher, S.

Bristol.—Convenience.—At Eastville-pk., for T.C. L. S. McKenzie, City E. and S., 63, Queen-sq. Dep. £2 2s.

Halifax.—Painting.—Decorating work in dining hall at Gibbet-st. Institution, for C.B. Borough Engineer, Crossley-st. Dep. £1 1s.

Hemsworth.—Repairs.—Repairs to stone boundary walls and new wrought-iron fencing, and private water supply to playing fields, at Secondary school, for West Riding E.C. Education Officer, County Hall, Wakefield.

Hollingbourn.—Cottages.—Two pairs, at Wheeler-st., Headcorn; 3 at Maidstone-rd., Headcorn; 3 pairs, South-lane, Sutton Valence; pair at Eythorne-st., Hollingbourn, for R.D.C. H. M. Apps, building surveyor, 33, Earl-st., Maidstone. Dep. £1 1s.

Hull.—Exchange.—Telephone exchange at Hedon, for T.C. D. Harvey, A.R.I.B.A., City Architect. Dep. £2 2s.

Hull.—Installation.—Electric light and bell installation in proposed new admission hospital at Mental Hospital, Willerby, for T.C. D. Harvey, A.R.I.B.A., City Architect.

Horwich.—Building.—Chapel and robing room in Ridgment Cemetery, for U.D.C. T. Green, E. and S., Public Hall. Dep. £2 2s.

Leeds.—Hall.—Congregational Church hall and schoolroom at Stainbeck-rd., Stainbeck, for committee. Dinsley & Moss, architects, 17, Union-st., Chorley. Dep. 10s.

London.—Underground Public Convenience.—For the Holborn B.C. Town Clerk, Town Hall, High Holborn, W.C.1. Dep. £2 2s.

London. — Cleansing and Painting. — Various Hospitals, for the L.C.C. Chief Engineer, Old County Hall, Spring-gardens, S.W.1. Dep. £1.

London.—Cleansing and Repainting.—For the L.C.C. Chief Engineer, Old County Hall, Spring-gardens, S.W. Dep. £1.

Melksham. — Houses. — 32 non-parlour semi-detached houses in concrete blocks, for U.D.C. R. P. Pearce, Town Surveyor. Dep. £3 3s.

Mitford and Launditch.—Cottages.—4 at Swanton Morley; 4 at Mattishall; 4 at Yaxham; 4 at Scarning, for R.D.C. W. J. Barton, clerk. Dep. £1.

Mullingar.—Installation.—Of electric wiring, lamps, etc., at the County Home and Hospital, and at Dispensary, for Westmeath County Board of Health and Public Assistance. J. O'Reilly, engineer, Castletown Geoghegan. Dep. £5.

Millport.—Houses.—Six at Barend-st., for T.C. G. Sinclair, architect, 121, Bath-st., Glasgow. Dep. 10s. 6d.

Redcar.—Houses.—20 parlour, at Dormanstown, for T.C. B.E.

Royton.—Conversions.—About 2,000 pail closets to water carriage system and the drainage connected therewith, for U.D.C. J. Pattison, M.I.M., and Cv.E., Town Hall. Dep. £1 1s.

Sheffield. — Painting. — Abbeydale Secondary school; Central Secondary girls' school; Training College; Collegiate Hall; Southbourne; King Edward VII school; Mount View; Pupil Teachers' centre (Arundel-st. annexe); College of Arts and Crafts; for E.C. W. G. Davies, F.R.I.B.A., City Architect. Dep. £1

Romsey.—Houses.—16 pairs non-parlour type cottages in parishes of Lockerley and Braishfield, for R.D.C. C. W. P. Dyson, S., Porters Bridge-st. Dep. £2 2s.

Stanley.—Houses.—42 non-parlour and road works and sewers on site, for U.D.C. S. Dep. £2 2s.

West Suffolk.—Repairs.—Painting and small repairs to following Secondary schools: County school and P.T. centre, Bury St. Edmunds; New-

market Secondary school; Sudbury Grammar school; Sudbury Girls' Secondary school, and painting and repairs at following Council schools: Clare, Elmswell, Lt. Waldingfield, Mildenhall Beck Row, Newmarket-rd., Polstead, Stanton, Stansfield, Sudbury, Sudbury Technical Institute, for E.C. A. Ainsworth Hunt, County Architect, 51a, Abbeygate-st., Bury St. Edmunds.

Yeovil.—Building.—For (1) New offices for Health Dept.; (2) central heating for Health Dept., offices, and (3) additional cell at refuse destructor, for T.C. A. J. Price, B.S.

Yeovil.—Houses.—16, at Marston Magna, 12 at Martock, 16 at South Petherton, 16 at Norton-sub-Hamdon, for R.D.C. Petter & Warren, F.R.I.B.A., of "Old Sarum."

JUNE 3.

Armagh.—Cottages.—163 labourers' cottages, for R.D.C. W. Calvert, clerk.

***Billericay.**—Additions.—Of 8 wards to isolation block at Billericay Infectious Hospital, Gooseberry-green, for R.D.C. Hugo R. Bird, F.R.I.B.A., St. Thomas's-gate, Brentwood. Dep. £2 2s.

Croesor.—Repairs.—Also decorating, etc., C.M. Chapel, Croesor. J. E. Griffith, L.R.I.B.A., chartered architect, O. Morris Roberts & Son, Bank-place, Portmadoc.

Dagenham.—Bath.—750 super. yds. 8 in concrete blocks, 600 super. yds. 4-in. concrete blocks, 300 super yds. 2-in. breeze concrete slabs, and 4,800 sq. ft. of corrugated asbestos roof covering, for open-air swimming bath in Valence-pk., for U.D.C. E. and S. Dep. £1 1s.

Glasgow.—Houses.—228 at Haghill housing scheme, for T.C. D. Stenhouse, T.C.

Northumberland.—School.—New school buildings to accommodate 200 junior and infant children, at Weetslade, Annitsford, for C.C. W. W. Tasker, County Architect, 17, Claremont-place, Newcastle-on-Tyne. Dep. £2 2s.

Portsmouth.—Heating.—In connection with Northern Secondary schools, for E.C. A. J. Sharp, architect, Education Department, Guildhall. Dep. £1 1s.

Portsmouth.—Repairs.—Repairs and materials for building trades only, for War Department. T. B. Harris, Lieut.-Colonel, R.E., Commander, Royal Engineers, Wessex Area (East). Royal Engineer Office, Mildam Barracks, Portsmouth.

South Dublin.—Cottages.—8 labourers' cottages, for R.D.C. G. Gallagher, clerk, 1, James's-st., Dublin.

Weston, Bath. — Telephone Exchange. — For H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

JUNE 4.

***Deal.**—50 Houses.—Fawcett Martindale, St. Neot's, Deal. Dep. £2 2s.

Hull.—Installation.—Accelerated low-pressure hot-water heating, etc., at head post office, for H.M.O.W. Contracts Branch, H.M. Office of Works, King Charles-st., S.W.1. Dep. £1 1s.

London. — Painting and Repairs. — Lionel Barrett, 6, Vere-st., Cavendish-sq., W.1.

Rochdale.—Painting.—External of 16 houses, etc., on Manchester-rd. and Bolton-rd., for C.B. B.S

JUNE 5.

Bromley.—Houses.—64, on various sites, for the Bromley R.D.C. Clerk, Council Offices, Orpington. Dep. £2 2s.

Down.—Building.—New school building, Crossgar; new school building, Carr; levelling of site for proposed new school building, Dundonald; for County Regional E.C. Castor J. Love, architect, 5, Wellington-place, Belfast. Dep. £1.

Down.—Building.—Erection of fencing, Killinchy; erection of fencing, Ballydrain; painting of residence, Ballydrain; painting of school building, Castle-st., Bangor; erection of out-offices, Inch, Downpatrick; repairs to school premises, Tyrella, Downpatrick, for Regional E.C. Castor J. Love, architect and civil engineer, 5, Wellington-place, Belfast.

Epping.—Houses.—Five pairs, near schools, Nettleswell, for R.D.C. W. Beard, Building Surveyor, Beechcroft, Harlow. Dep. £1 1s.

***Kent.**—Enlargement of Lydd Dungeness Council school. Director of Education, Springfield, Maidstone. Dep. £2 2s.

London.—Installation.—Accelerated low-pressure hot-water heating, etc., at County Court, Clerkenwell, for H.M.O.W. Contracts Branch, King Charles-st., S.W.1. Dep. £1 1s.

Newcastle-upon-Tyne.—Painting.—Repainting externally 1,086 houses, for T.C. Housing Architect, 18, Cloth Market. Dep. £1 1s.

Wolverhampton.—Extension.—Offices, and extension to warehouse at Herbert-st. goods-yd., for G.W.R. F. R. E. Davis, secretary, Paddington Station, London. Dep. £2 2s.

JUNE 6.

Bristol.—Houses.—Houses and workshops, as follows: Sea Mills housing site, 30 houses; Speedwell housing site, 1 workshop; Horfield housing site, 1 workshop; Bedminster Down housing site, 1 workshop, for T.C. City Engineer, Housing Department, 51, Prince-st. Dep. £1.

Devon.—Improvements.—To Council schools as follows:—Ashwater, internal renovations and repairs; Ashwater: Hunscott, internal and external renovations and repairs; Bampton Infants, internal renovations and repairs; Bradworthy, internal renovations and repairs; Chulmleigh: Week, internal renovations; Colyton (boys, girls and infants), internal and external renovations and repairs; East Worlington, internal renovations to school, exteral renovations to school and teacher's house; Exmouth infants, external renovations and repairs; Mariansleigh and Romansleigh, external renovations; Shaugh Prior, internal renovations and alterations to house, internal and external renovations and ventilation to school; Walkhampton: Foggintor, alterations to offices and new drainage, new bathroom and internal renovations to teacher's house, and Whitchurch: Horrabridge, internal and external renovations, for C.C. County Architect's Office, 97, Heavitree-rd., Exeter.

Dublin.—Re-slating.—Roofs, etc., at Supreme Courts and Revenue Offices, Dublin Castle, for Commissioners of Public Works. T. Cassidy, Secretary, Office of Public Works. Dep. £1.

***Exeter.**—School.—John Bennett, City Architect. Dep. £5.

Hemel Hempstead.—Extension.—To administrative block at Isolation Hospital, Bennetts End, for Joint Hospital Board. P. W. Prevett, Architect to Board, Bovingdon, Herts. Dep. £1 1s.

Old Colwyn.—School.—Elementary school to accommodate 400 scholars, for Denbighshire E.C. W. D. Wiles, County Architect. Dep. £1 1s.

Plymouth.—Painting, for H.M.O.W. Contracts Branch, King Charles-street, London, S.W.1. Dep. £1 1s.

Pudsey.—Houses.—56, for T.C. B. H. Noble, B.S. Dep. £5.

Smallburgh. — Cottages. — In undermentioned parishes: Happisburgh, 4 pairs; Hickling, 3 pairs; Ingham, 1 pair; Ludham, 3 pairs; Palling, 3 pairs; Smallburgh, 1 pair, for R.D.C. A. Peploe, clerk, 25, Grammar School-rd., North Walsham. Dep. £1.

Southwold.—Walls.—Concrete walls, together with promenades and other incidental works, for T.C. J. S. Hurst, B.E. Dep. £3.

JUNE 7.

Chapel-en-le-Frith.—Houses.—6 non-parlour type in rubble stone at Castleton, for R.D.C. T. Dinsdale, Inspector and Surveyor. Dep. £2 2s.

Chesterfield.—Additions.—To following schools: Brushes school, Sheepbridge; Central school, Ashgate-rd., for T.C. Wilcockson & Cutts, architects, 12, Saltergate. Dep. £2 2s.

Leeds.—Painting.—Also cleaning at infectious diseases hospital, Seacroft, and tuberculosis sanatorium, Killingbeck, for T.C. Thos. Thornton, T.C.

Steyning West.—Repairs.—Painting work, repairs, etc., at various housing schemes within parishes of Ashurst, Beeding, Henfield, Lancing, Shermanbury, Sompting, and Steyning, for R.D.C. H. W. Tee, engineer, Union Offices, Ham-rd., Shoreham-by-Sea.

***West Ham.**—Heating Apparatus.—Installation of, at Water-lane school. John H. Jacques, 61, West Ham-lane, Stratford, E.15. Dep. £1.

***West Ham.**—Cleansing and Painting.—To various schools. J. H. Jacques, 61, West Ham-lane, Stratford, E.15. Dep. £1.

JUNE 9.

***Exeter.**—College Hostel.—Registrar, 2, Newbuildings. Dep. £5.

Heo.—Cottages.—10 pairs, facing Rochester-rd., for R.D.C. W. J. Stimpson, Architect and Building Surveyor. Dep. £5 5s.

Samford.—Bungalows.—18 at Shotley, for R.D.C. H. Watling, S., 5, Queen-st., Ipswich. Dep. £2 2s.

Yeovil.—Conveniences.—2 conveniences, 3 shelters, and dressing-rooms at Mudford-rd. recreation ground, and extension to cattle market, for T.C. A. J. Price, B.S.

JUNE 10.

Aberdeen.—Building.—Telephone repeater station, for H.M.O.W. Architect, H.M. Office of Works, 122, George-st., Edinburgh. Dep. £1 1s.

Belfast.—Extensions.—Central laundry buildings, at Infirmary, for B.G. Young & MacKenzie, chartered architects. Dep. £3 3s.

Belfast.—Alterations.—At convalescent department, at Infirmary, for B.G. Young & MacKenzie, chartered architects. Dep. £2 2s.

Belfast.—Alterations.—Lavatory accommodation and alterations at main infirmary building, for B.G. Young & MacKenzie, chartered architects. Dep. £2 2s.

Clacton-on-Sea.—Senior School.—For the Essex C.C. County Architect, Springfield Old Court, Chelmsford. (Dep. £2 2s., to F. H. Owers, County Accountant, Duke-st., Chelmsford.)

Guildford.—Decorations.—To certain elementary schools, for T.C. J. W. Hipwood, B.S.

Haine.—Building.—Covered way at Board's Isolation Hospital at Haine, near Ramsgate, for Isle of Thanet Joint Hospital Board. Francis Shea, architect, Wickens, Salmestone Rise, Margate. Dep. £1 1s.

Hemel Hempstead.—Houses.—For the Corporation. T.C., Town Hall. Dep. £7 7s.

Sandy.—Houses.—12, and ancillary work at Westrd., for U.D.C. F. C. Levitt, architect, Market sq., Biggleswade. Dep. £ 2s.

JUNE 11.

***Ashtead, Epsom.**—Telephone Exchange.—For H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

Birmingham. — Telephone Exchange. — For H.M.O.W. Contracts Branch, King Charles-street, London, S.W.1. Dep. £1 1s.

Durham.—Schools.—Birtley new intermediate Council school (480 scholars), Bishop Auckland new primary Council school (288 scholars), West Stanley, Shield-row, new intermediate Council school (960 scholars), for County E.C. F. Willey, F.R.I.B.A., 34, Old Elvet, Durham.

Folkestone.—Installation.—Of low pressure hot water heating plant at Morehall Council school, for E.C. B.E., 11, Church-st. Dep. £1 1s.

***Hendon.**—Repairs and Decorations.—To various schools, for the U.D.C. Clerk, Town Hall. Dep. £1 1s

Kimmage.—Houses.—Sixty-two, at Kimmage, Co. Dublin, for Irish Sailors' and Soldiers' Land Trust. W. J. Brown, F.R.I.B.A., F.S.I., Architect, Irish Sailors' and Soldiers' Land Trust, 50, Upper Mount-st., Dublin. Dep. £5 5s.

London.—Foundations.—Construction of site works, foundation works and buildings in the area of the North-west England and North Wales Electricity Scheme, for Central Electricity Board. R. H. Fox, secretary, Trafalgar-bldgs., 1, Charing Cross, W.C.2. Dep. £1 1s.

Southend-on-Sea.—Additions.—Additional cell accommodation at the Central Police Court and incidental works in connection therewith, for C.B. R. H. Dyer, B.E. Dep. £2.

Twickenham.—Houses.—For the Corporation, Town Clerk, Municipal Offices. Dep. £2 2s.

JUNE 12.

Barrow-in-Furnes. — Telephone Exchange. — For H.M.O.W. Contracts Branch, King Charles-street, London, S.W.1. Dep. £1 1s.

Hull.—Painting.—Maternity home and infants' hospital, Hedon-rd.; East Hull Clinic, Morrill-st., and 69, Coltman-st., for T.C. D. Harvey, A.R.I.B.A., City Architect.

Nottingham.—Houses.—347 of small type on Colwick estate, for T.C. T. C. Howitt, architect, 58-59, Long-row. Dep. £1.

South Hiendley.—Conversion.—Of closets and drainage works at Felkirk Council school, for West Riding E.C. Education Officer, County Hall, Wakefield.

Staveley.—Library.—Library, for Derbyshire E.C. G. H. Widdows, F.R.I.B.A., Architect to the Committee, County Offices, St. Mary's Gate, Derby. Dep. £1 1s.

JUNE 13.

***Birkenhead.**—Houses.—For the Corporation. Town Clerk, Town Hall. Dep. £2 2s.

***Birkenhead.**—Painting and Decorating.—Town Clerk, Town Hall. Dep. £1 1s.

***Croydon.**—Conveniences.—For the Corporation. Town Clerk, Town Hall. Dep. £2 2s.

***London.**—Alterations.—Town Clerk, Town Hall, Highgate, N.6.

***London.** — Bowling Green. — Construction of Town Clerk, Town Hall, Highgate N.6.

West Riding.—Painting.—At Castleford and Normanton and District Mining and Technical Institute, for E.C. Education Officer, County Hall, Wakefield.

JUNE 14.

Bristol.—Painting.—Also colouring, etc., of certain schools, for T.C. W. Ludford Freeman, Director of Education. Dep. £1 1s.

Harrow-on-the-Hill.—Cottages.—Adjoining Roxeth recreation ground, for U.D.C. J. P. Bennetts, E. and S.

Lydiate.—Cottages.—2 semi-detached, for Lancashire C.C. County Surveyor and Bridgemaster, County Offices, Preston. Dep. £2.

JUNE 16.

***Croydon.**—52 Houses.—Town Clerk, Town Hall. Dep. £3 3s.

***Feltham.**—Houses.—Clerk, Council Offices, High-st. Dep. £2 2s.

***Hendon.**—Extensions.—To Isolation Hospital, for the U.D.C. Chairman of the Council, Town Hall, N.W.4. Dep. £5 5s.

Leeds.—Extension.—Of colony for mental defectives at Meanwood-pk., for T.C. J. M. Sheppard, F.R.I.B.A., 38, Bedford-place, Bloomsbury-sq., W.C.1. Dep. £3 3s.

Wednesbury.—Houses.—26 parlour type, on the Park-lane site, for T.C. Arthur Booth, B.E. and S. Dep. £2 2s.

Whitefield.—Houses.—(1) 108, and (2) 220, on Victoria estate, also drains, paths and fences, road and sewer works in connection therewith, for U.D.C. C. F. Porter, clerk.

JUNE 17.

***Walthamstow, E.17.**—Renovation.—Interior and exterior of various schools, for the Education Committee. Director of Education, 263, High-street.

JUNE 18.

East Ham.—Painting.—Repairs and painting, etc. (internal work), of Cornwall school, Walton-rd., Manor Park, E.12, and St. Winefride's R.C. school, Church-rd., Manor Park, E.12, and for limewhiting of playsheds and urinals at all schools, for C.B. A. T. Bridgewater, B.E. Dep. 10s.

East Ham.—Installation of electric lighting at Monega and Sandringham schools, for C.B. F. E. Thompson, Secretary. Dep. 10s.

Nottingham.—Painting.—Cleaning and painting at various school premises, for E.C. A. H. Whipple, Director of Education. Dep. £1.

***Tettenhall, Wolverhampton.**—Telephone Exchange.—For H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

JUNE 19.

***Hitchin.**—Enlargement of Grammar School.—For Herts C.C. Clerk, Education Dept., Hertford. Dep. £1 1s.

***London.**—Garage Building.—In Borough of St. Pancras. Clerk to the Trustees, 2, Endsleigh-st., Tavistock-sq., W.C.1. Dep. £1 1s.

***Regent's Park, N.W.**—Sports Pavilion.—For H.M.O.W. Contracts Branch, King Charles-st., S.W. Dep. £1 1s.

JUNE 20.

***Eccles.**—Post Office.—For H.M.O.W. Contracts Branch, King Charles-st., S.W.1. Dep. £1 1s.

Leeds.—Institute.—Pathological Institute at St. George's-rd., for University. C. Proctor and F. L. Charlton, AA.R.I.B.A., 40, Clarendon-rd. Dep. £2 2s.

***Leeds.**—Pathological Institute.—Erection of. A. E. Wheeler, Registrar, The University. Dep. £2 2s.

***Poole.**—Alterations and Additions.—To Hamworthy School. Borough Engineer, Municipal Offices. Dep. £5 5s.

JUNE 21.

*Swindon.—Houses.—For the Corporation, Town Clerk, Town Hall.

NO DATE.

Heworth.—Additions.—To church hall, Heworth-on Tyne. R. Wylie, architect, 24, Grainger-st. West, Newcastle.

Innerleithen.—Conveniences.—Two small public conveniences, for T.C. B.S.

*London, N.—Repairs, etc.—To various schools. Secretary for Education, Hornsey Education Office, 6, Topsfield-Parade, Crouch End, N.8.

London.—Painting.—Certain lighthouses around coasts of England and Wales, for Corporation of Trinity House. M. K. Smith, secretary, Trinity House, Tower Hill, London E.C.3.

Morley.—Plastering.—Also pointing parish church, tiling west entrance, and providing new stone step, also work required in the extension of graveyard. Vicarage, Rooms-lane.

MATERIALS, etc.

JUNE 2.

Worsborough.—Road Materials.—For U.D.C. T. Shield, S.

JUNE 3.

Kingston-upon-Hull.—Plumbing Materials, etc.—for T.C. J. N. Waite, City Electrical Engineer and Manager, Electricity Works, Sculcoates.

JUNE 6.

Coulsdon and Purley.—Gloss Paint.—For U.D.C. Housing Supervisor, 71, Brighton-rd., Purley.

JUNE 9.

Abernethy.—Water Supply.—For T.C. Bruce & Proudfoot, civil engineers, 63, Nicol-st., Kirkcaldy Dep. £1.

Glasgow.—Cement and Lime.—For Electricity Department. General Manager, 75, Waterloo-st., C.2.

Guildford.—Granite, etc.—For T.C. J. W. Hipwood, B.S.

JUNE 10.

Barnes.—Granite Kerbing.—For U.D.C. F. P Kindell, E. and S.

ENGINEERING, IRON AND STEEL

JUNE 2.

Hitchin.—Supply.—Providing and laying about 1,000 yds. 6 in., 2,190 yds. 4 in., 1,762 yds. 3 in., 490 yds. 2 in., 226 yds. 1 in., 955 yds. ¾ in. cast-iron and galvanised pipes with all fittings; engine and pump; the construction of concrete reservoir, at Pirton, for R.D.C. A. E. Passingham, 5, Bancroft. Dep. £2 2s.

JUNE 3.

Aberdeen.—Extension.—Of wharf at Commercial Quay, for Harbour Commissioners. R. Gordon Nicol, engineer, Harbour Engineer's Office, Aberdeen. Dep. £3 3s.

Colwyn Bay.—Culvert.—In Beach-rd., Old Colwyn, for U.D.C. W. J. Dunning, E. and S. Dep. £2 2s.

JUNE 4.

Oxford.—Reservoir.—Covered concrete service reservoir and two lengths of pipeline, for T.C. A. Holt, T.C. Dep. £10.

Wembley.—Extension.—Of sewage disposal works, Perivale-lane, Alperton, for U.D.C. C. R. W. Chapman, E. and S. Dep. £2 2s.

Windlesham.—Sewerage.—6,300 yds. of 7 in. cast-iron rising main and 3,700 yds. of 12 in., 9 in. and 6 in. cast-iron and stoneware pipe sewers, together with pumping station and other incidental works, for U.D.C. Willcox & Raikes, engineers, 33, Great Charles-st., Birmingham. Dep. £5 5s.

JUNE 5.

Truro.—Sewerage.—Provision and laying of about 3½ miles of stoneware concrete and cast-iron pipe sewers, and construction of manholes, flushing tanks, and execution of other contingent works, for T.C. F. A. Barnes, City E. and S. Dep. £5.

JUNE 7.

Evesham and Pebworth.—Water Supply.—Provision, laying and jointing of about 8 miles of 6-in., 4-in., 3-in., and 2-in. cast-iron mains; construction reservoir, meter, valve and hydrant chambers and provision and erection of elevated steel service tanks, together with other incidental works, for R.D.C. Willcox & Raikes, engineers, Birmingham. Dep. £5 5s.

Plymouth.—Steelwork.—6½ tons of 22 ft. 4 in. lengths of N.B.S.B. 10 "A" girder section, for T.C. J. Wibberley, City E.

JUNE 10.

Barnes.—Alterations.—Flood prevention work and dock alteration at Terrace, Lonsdale-rd., for U.D.C. F. P. Kindell, S. Dep. £2 2s.

ROAD, SEWERAGE, AND WATER WORKS

JUNE 2.

Anglesey.—Roads.—Diversion and construction of new roadway and footways at Efail Newydd, Pentraeth, on the Beaumaris-Pentraeth-rd., for C.C. M. Spencer Rogers, C.S., Glanaber, Llangefni. Dep. £5.

Brentford and Chiswick.—Woodpaving.—1,775 yds. super. or thereabouts of woodpaving on and including concrete foundations in Cambridge-rd., Chiswick, together with works incidental thereto, for U.D.C. E. Willis, E. and S.

Carshalton.—Making-up.—Of Upland-rd. and Farm-rd., for U.D.C. R. S. Davey, E. and S. Dep. £2.

Ealing, W.5.—Roads.—Making-up of, for the Town Council. Town Clerk, Town Hall.

Hendon.—Extension.—450 yds. of 12-in. and 9-in. cast-iron and stoneware pipe sewers with manholes and other works in connection therewith, in Selvage-lane, for U.D.C. A. O. Knight, E. and S. Dep. £5.

London.—Sewer.—1,440 ft. of 4 ft. by 2 ft. 8 in. brick sewer (mostly in tunnel) and contingent works beneath Little Britain, etc., for Corporation. City E. Dep. £2 2s.

Otley.—Making-up.—Of Cambridge-st., back Albion-st., back Almscliffe-ter., and back Guycrofts, north and south, for U.D.C. C. F. Hodgson, S. Dep. £1 1s.

Southwell.—Water Supply.—In parishes of Southwell, Halloughton, and Thurgarton, for R.D.C. Sands & Walker, consulting engineers, Miltonchams., Nottingham. Dep. £3 3s.

Stockton-on-Tees.—Improvements.—To Talbot-st. and Oakwell-st., Norton, for T.C. B.E.

Swindon.—Sewerage Works.—In Rodbourne Cheney, for T.C. J. B. L. Thompson, B.S. Dep. £10 10s.

JUNE 3.

Bucklow.—Water Supply.—Laying and jointing of approx. 2,000 yds. of 4-in., 4,800 yds. of 3-in. and 2,400 yds. of 1¼-in., 1¼-in. and 1-in. G.W.I. tubes, together with specials, fittings and appurtenances, for R.D.C. H. V. Shaw, E. and S., 25, Stationbuildings, Altrincham.

Devizes.—Granite.—Supplying and laying about 600 sq. yds. of bituminous bound granite, for T.C. A. W. Jakeway, B.S.

Kilmarnock.—Widening.—Of Glasgow-rd. and Dundonald-rd., for T.C. W. Dunbar, B.S., Market Bridge. Dep. £2 2s.

Maldon.—Mains.—Laying approximately 1,500 lin. yds. of 3-in. diameter cast-iron water mains, with the appurtenant fittings, in Mundon-rd., for T.C. B.E.

New Ross.—Reconstruction.—Quay-rd in reinforced p.c. concrete, for U.D.C. J. J. Shortall, Town S.

Staffordshire.—Improvements.—Widening and improving of Stafford-Lichfield-rd. at Satnall Hills, near 5th mile post from Stafford, for C.C. R. S. Murt, C.S., Lloyd's Bank-chambs., Stafford.

JUNE 4.

Bedford.—Drains.—700 yds. lin. of 9-in. and 12-in. sewers and surface water drains, together with manholes, catchpits and gullies, and of 500 yds. lin. of temporary roads, footpaths and foundations, for T.C. H. Greenshields, B.E. and S. Dep. £2 2s.

Birmingham.—Reconstruction.—Of footways in Midland-rd., Cotteridge, including concrete flag paving, new footway crossings and new pennant kerb, for T.C. H. H. Humphries, City E. and S. Dep. £2.

Clacton.—Concrete Flags.—For U.D.C. S.

Hove.—Sewerage.—80 yds. of 48 in. dia. cast-iron surface water outfall to low tide; 47 yds. of 48 in. dia. cast-iron inverted syphon: 277 yds. of 48 in. concrete tube, for T.C. T. R. Humble, B.S. Dep. £2 2s.

Hove.—Making-up.—Roadway, relaying kerbing and channelling, laying new paving, and other works in connection therewith in Princes-sq., for T.C. T. R. Humble, B.S.

Luddenden Foot.—Sewer.—At Finkle-st., for U.D.C. S.

Twickenham.—Drainage.—New roadway, open storage bins, and for drainage works at London-rd. depot, for T.C. G. R. King, B.E. and S. Dep. £2 2s.

Waterford.—Asphalt.—Laying of single coat asphalt pavement in 8 streets, for C.B. David Sheedy, B.S., 12, The Mall.

Wembley.—Surfacing.—Of Preston-rd (section 1) (approx. 12,000 sq. yds.) with bituminous asphalt 2 in. in thickness, for U.D.C. Cecil R. W. Chapman, E. and S. Dep. £1 1s.

JUNE 5.

Eton.—Making-up.—Private road at Barnespool, Eton, for Baldwin's Bridge Trust. T. J. Hester, Bridgemaster, 97, High-st.

Southend-on-Sea.—Making-up.—Of Eaton-rd., Esplanade-gardens, Leas-gardens, and Montague-av., and incidental works in connection thereto, for C.B. R. H. Dyer, B.E. and S. Dep. £1 each

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JUNE 7.

Coulsdon and Purley.—Widening.—Of portion of Old Lodge-lane, Purley, for U.D.C. G. A. Ballard, S. Dep. £1 1s.

Romford.—Widening.—Havering-rd., including laying surface-water sewers with necessary manholes, street gullies and other works incidental thereto, for U.D.C. F. G. Beaumont, E. and S. Dep. £1 1s.

JUNE 9.

Chichester.—Mains.—2,000 yds. of class C 10-in. cast-iron water mains and specials, for T.C. F. J. Lobley, City E.

JUNE 11.

Birmingham.—Sewers.—5,000 yds. of brick and concrete stoneware pipe and concrete tube sewers and culverts and incidental works in private lands, Goosemoor-lane, Gravelly-lane, South-grove, Court-lane and Short Heath-rd., Erdington, for T.C. H. H. Humphries, City E. and S. Dep. £2.

Birmingham.—Sewer.—200 yds. of brick and concrete and concrete tube sewer, and improvement of existing Brookcourse in Oxhill-rd., etc., for T.C. H. H. Humphries, City E. and S. Dep. £2.

Newton-in-Makerfield.—Making-up.—Of private street works, for U.D.C. R. Latham, S. Dep. £1 1s.

Swansea.—Drainage.—Construction of about 11,671 yds. lin. stoneware pipe sewers, for C.B. J. Richard Health, Chief Engineer. Dep. £5 5s.

JUNE 12.

Dundee.—Pipes.—655 ft. of 42 in. diameter cast-iron spigot and faucet piping, for T.C. D. H. Bishop, General Manager and Engineer, Electricity Supply Dept., Dudhope Crescent-rd. Dep. £2 2s.

JUNE 14.

Limerick.—Surfacing.—About 25,900 sq. yds. of main streets of Rathkeale, Newcastle West and Abbeyfeale, in reinforced concrete, for C.C. T. F. Ryan, C.S., 82, O'Connell-st.

Limerick.—Surfacing.—In cement-bound macadam about 58,100 sq. yds. of road from Limerick to Ballyneety, for C.C. T. F. Ryan, C.S., 82, O'Connell-st., Limerick.

Auction Sales, Tenders, etc.

JUNE 3, 4 and 5.

Exmouth.—"Marley," Withycombe Raleigh. C. C. Cadle, F.N.A.A., will sell, on premises, fixtures and fittings prior to demolition. Auctioneer, Central-chams., 12, St. Margaret's-st. Canterbury.

JUNE 12.

*Ascot.—Hall, Pain & Foster will sell, at the R.A.F. Aeroplane Depot, building and other materials. Auctioneers, 48, West-street, Fareham.

Public Appointments

JUNE 4.

*Winchester.—Tracer required in County Surveyor's Department The Castle.

JUNE 5.

Northallerton.—Clerk of Works.—Secretary, Education Committee, County Hall.

JUNE 7.

*Leicester.—Clerk of Works. Director of Education, Town Hall.

JUNE 9.

*Scarborough.—Architectural Assistant (Temporary). Borough Engineer, Town Hall.

JUNE 12.

*Oldham.—2 Surveying Assistants, 2 Private Street Works Assistants, 1 Architectural Assistant required by the Corporation. Borough Engineer, Town Hall.

JUNE 14.

*Brixton, S.W.4.—Instructor in Plastering required by L.C.C. Education Officer (T.1), The County Hall, S.E.1.

*London, S.W.4.—Instructor in Masonry required by L.C.C. Education Officer (T.1), The County Hall, S.E.1.

*Neath.—Architectural Assistant. Borough Engineer, Gwyn Hall.

*Norwich.—Town Planning Assistant. City Engineer, Guildhall.

*Truro.—(*a*) Architectural Assistant, (*b*) Architectural and Surveying Assistant, temporary, required by Cornwall C.C. County Architect, County Hall.

JUNE 16.

*Salford.—Building Inspector. City Engineer, Town Hall.

JUNE 18.

*Greenwich, S.E.10.—Junior Technical Assistant required in Borough Engineer's Department. Town Clerk, Town Hall.

JUNE 23.

*Bolton.—Weights and Measures Office, etc.—Erection of, for the Corporation. Town Clerk, Town Hall. Dep. £5.

*Uganda.—Instructor in Building, C.A. (M.). The Secretary, Board of Education, Whitehall, S.W.1

NO DATE.

*London.—Architectural Assistants required by H.M.O.W. Chief Architect, Storey's-gate, S.W.1.

A Correction.

In a paragraph which appeared in our last issue under New Buildings in London we stated that the City of London Corporation were recommending a new dormitory at the school in Carmelite-street, E.C. This, we understand, is incorrect, as the work is proposed to be carried out at the City of London Freemans School at Ashtead Park, Surrey.

RATES OF WAGES IN THE BUILDING TRADE

[Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.]

	Masons.	Bricklayers.	Carpenters Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers.
Aberdare	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Accrington	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Aldershot	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Alfreton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Alnwick	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Altrincham	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Ashford (Kent)	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Ashington	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Ashton-under-Lyne	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Aylsham	1/3½	1/3½	1/3½	1/3½	1/2½	1/3½	1/3½	11½
Banbury	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Barnsley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Barnstaple	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Barrow-in-Furness	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Barry	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Basingstoke	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Bath	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bedford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Berwick	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bexhill	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Birkenhead	1/8½	1/8½	1/8½	1/9½	1/8½	1/8½	1/8½	1/3½
Birmingham	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bishop Auckland	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Blackburn	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Blackpool	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bognor Regis	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Bolton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bournemouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bradford	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bradford-on-Avon	1/3½	1/3½	1/3½	1/3½	1/3½	1/2½	1/3½	11½
Braintree	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Brentwood	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bridgwater	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Bridlington	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Brighton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bristol	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bromsgrove	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bromyard	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Bungay	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
Burnley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Burton-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bury	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Buxton	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Cambridge	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Canterbury	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Cardiff	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Carlisle	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Chatham	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Chelmsford	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Cheltenham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Chester	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Chesterfield	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Chorley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Cirencester	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Clacton	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Colchester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Coventry	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Cranbrook	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
Crewe	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Cromer	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Darlington	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Deal	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Denbigh	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Derby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Devizes	1/3½	1/3½	1/3½	1/3½	1/3½	1/2½	1/3½	11½
Dewsbury	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Doncaster	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Dorchester	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/2½	11½
Dorking	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Dovercourt	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Driffield	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Droitwich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Durham	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Eastbourne	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
E. Glam. (Mon. Val.)	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Ely	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Exeter	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Exmouth	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Fakenham	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Felixstowe	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Folkestone	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Frome	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/2½	11½
Glossop	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Godalming	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Goole	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Gosport	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Grantham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Great Yarmouth	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Grimsby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Guildford	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Halifax	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Harpenden	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Harrogate	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Hartlepools	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Harwich	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Hastings	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Hatfield	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Hednesford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Hereford	1/5	1/5	1/5	1/5	1/5	1/5	1/4	1/0½
Herne Bay	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Hertford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Hitchin	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Hoddesdon	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Holt	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11½
Huddersfield	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Hull	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Hunstanton	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Huntingdon	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Isle of Wight	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Ipswich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Keighley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Kettering	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Kidderminster	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
King's Lynn	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Lancaster	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Leamington Spa	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Leeds	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Leicester	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Leighton Buzzard	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Lichfield	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Lincoln	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Littlehampton	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Liverpool	1/8½	1/8½	1/8½	1/9½	1/8½	1/8½	1/8½	1/3½
Llandudno	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Llanelly	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
London:								
12 m. radius	1/8½	1/8½	1/8½	1/8½*	1/8½	1/8½	1/7½	1/3½
12-15 m. radius	1/8	1/8	1/8	1/8*	1/8	1/8	1/7	1/3
Loughborough	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Lowestoft	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Luton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Macclesfield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Maidstone	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Malvern	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Manchester	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Mansfield	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Margate	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Market Harborough	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Matlock	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Melton Constable	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
Melton Mowbray	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Merthyr Tydfil	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Middlesbrough	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Newark	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Newbury	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Newcastle-on-Tyne	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Newcastle-ur-Lyme	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
New Forest	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Newmarket	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Newport, Mon.	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Northampton	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Norwich	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Nottingham	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Nuneaton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Oakham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Oldham	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Oxford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Paignton	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Peterborough	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Plymouth	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Pontypridd	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Portsmouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Preston	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Ramsgate	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Reading	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Redcar	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Redditch	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Reigate	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Retford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Ripon	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Rochdale	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Rochester	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Rugby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Saffron Walden	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
St. Albans	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
St. Helens	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Sawbridgeworth	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Saxmundham	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Scarborough	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Sevenoaks	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Sheffield	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Shrewsbury	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Sittingbourne	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Southampton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Southend-on-Sea	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Southport	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
South Shields	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Stevenage	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Stockport	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Stockton-on-Tees	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Stoke-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Stourbridge	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Stourport	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Stowmarket	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Stratford-on-Avon	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Stroud	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Sunderland	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Swaffham	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
Swansea	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Swindon	1/5	1/5	1/5	1/5	1/5	1/6	1/5	1/1½
Tamworth	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Taunton	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Thetford	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Torquay	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Totnes	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1½
Trowbridge	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Tunbridge Wells	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1½
Uttoxeter	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Wakefield	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Walsden	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Warminster	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/2½	11½
Warrington	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Warwick	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Wells (Norfolk)	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
Welwyn Gar. City	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
West Bromwich	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Weston-sup-Mare	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Weymouth	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Whitby	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Wigan	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Winchester	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Windsor	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Wisbech	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Wolverhampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Woodbridge	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Worcester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Worksop	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Worthing	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Wrexham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Wycombe	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Wymondham	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
York	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½

* The rate recognised by the National Association of Plasterers, Granolithic and Cement Workers, is 1/11½ per hour.

For Building Trade wages in Scotland, see page 1066.

PROPOSED NEW BUILDINGS & OTHER WORKS*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians, B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B. of E. for Board of Education, M.A.B. for Metropolitan Asylums Board; and M.W.B. for Metropolitan Water Board; Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor, D.S.; Clerk, C.; Town Clerk, T.C.; County Engineer, C.E.; County Surveyor, C.S.; County Architect, C.A.; Surveyor, S.; Engineer, E.; Borough Architect, B.A.; Architect, A.

Aberavon (Glam).—Extensions to Working Men's Club and Institute, Talbot-st. Plans by T. Gibb & Edwin Smith, architects, Borough-chams., Green-st., Neath.

Accrington.—Church of England Managers to provide two senior schools at St. James and St. Mary Magdalene.

Airedale.—Pontefract R.D.C. propose to proceed with houses. Tennant & Smith, architects.

Aldershot.—Two greenhouses to be erected at Manor-pk., at £500, for T.C.—T.C. to apply to M.H. and B. of E. for sanction to borrow £50,608 for higher standard school at Aldershot Manor-pk.

Ambleside.—Ribble Motor Services propose service depot on main Grasmere-rd.

Amersham.—R.D.C approved 16 houses at Chalfont St. Peter.

Barking Town.—U.D.C. making application to M.H. for loan of £70,316 for school work.—Plans passed: Spraying shop, rear of Heath-st., British East Light, Ltd.; shop fittings and outbuildings, 446, Hedgemans-rd., J. J. Tilley; alterations to boiler house, Abbey-rd., W. Warne & Co., Ltd.; house drains to 458 houses, 12 section, Becontree Housing estate, L.C.C.; alterations and additions, 442, Hedgemans-rd., Pearks Dairies, Ltd.; market and billiards hall, Broadway, L. White; paint factory, West Bank, Wilson & Co.

Birkenhead.—W. Griffiths, architect, 5, Hamilton-sq., preparing plans for houses in Shrewsbury-st. and Lingdale-st.

Birmingham.—Shops on site in Paradise-st., West Bromwich. Plans by C. Fillmore, architect, 8, Newhall-st.

Blackpool.—Williams Deacon's Bank, Ltd., 38, Mosley-st., Manchester, proposing alterations and additions premises at corner Bond-st. and Dean-st., South Shore. Plans by Chas. N. Taylor, Williams Deacon's Bank, architect's department, Mosley-st., Manchester.

Bolton.—Church at St. Bede's, Morris-green, for Parochial Council (Vicar, Rev. J. Woollen). Architect, F. R. Freeman, 21, Wood-st.

Bolton.—E.C. propose sub-station in Rothwell-st.

Bradford.—Infant schools near parish church, at £6,000. Plans by City Architect's Dept.—Three shops, Griffe-rd., by Brighouse Industrial Co-operative Society, Ltd.—Additional houses on Shirley Manor estate, and 22 houses at Common-rd., Low Moor.

Bradford.—Extensions at Drummond-rd. modern school and Thornbury primary school. Plans by City Architect.

Brighton.—Kemp Town Brewery, St. George's-rd., propose to rebuild premises Richmond-place, Richmond-st. Plans by Denman & Son, A.R.I.B.A., architects and surveyors, 27, Queen's-rd

Bucks.—E.C. propose three-year higher education programme, costing £107,300.

Bulwell.—L. Oakes, 19, Main-st., purchased site in Anchor-ter. for premises.

Burbage.—Cooper & Sons (Nuneaton), Ltd., builders, Midland-rd., prepared plans for 66 houses in Three Pots-rd.

Bury.—Plans been approved for lay-out for 420 flats at Springs.—Sanction been received for borrowing £10,000 for 20 houses at Walmersley. John Chadwick, B.E.

Buxton.—Plans prepared by C. Flint, architect, 20, St. Peter's-rd., Fairfield, for church hall at Fairfield.

Cheshunt.—Herts C.C. decided to purchase 6½ acres of land adjoining smallpox hospital for hospital extensions.

Chester.—T.C. recommend application to M.H. for sanction erection upon Lache estate of 42 parlour houses, 166 non-parlour houses, and 8 combined houses and shops, and for construction of roads and sewers.—City S. to carry out painting work at Handbridge and Eaton-rd. estates.—Application to be made to Electricity Commissioners for sanction to borrowing monies to defray cost of alterations at electricity showrooms.—Plans passed: 4 houses, Newton-lane, W. A. Davies; 49 houses, Newton-lane, E. B. Steer.—M.H. received sanctions to borrowing £4,050 and £260, for provision of public sanitary conveniences, Earls Villas.

Cheriton-cum-Hardy.—Mills & Murgatroyd, 23, Strutt-st., Manchester, architects for conversion premises on Barlow Moor-rd. into bank for Manchester and County Bank, Ltd., 55, King-st., Manchester.—N. Cowell, estate manager, Lord Egerton of Tatton, Estates Office, 34, John Dalton-st., Manchester, has had plans prepared for shippons and dairy to Hardy Farm, Hardy-lane.

Church Gresley.—Swadlincote and District Labour Party raising funds for hall.—Derbyshire Education Committee to erect new school.

Clacton-on-Sea.—Essex E.C. recommend, subject to sanction of C.C. and B. of E., approval be given to erection of assembly hall, together with necessary gymnasium equipment, for County High School.

Cross Hills.—New Jerusalem Church Society proposes new church on Skipton-rd., Cross Hills, near Keighley. Plans by James Hartley & Son, Swadford-chams., Skipton.

Croydon.—C.B. approved: C. H. Ridge, Katharine-st., 11 garages, Hurst View-rd.; M. Brown & Sons (Croydon), Ltd., Abbey House, Victoria-st., S.W.1, 16 houses, Meadway, Spring Park Farm estate; Chart, Son & Reading, Katharine-st., 20 houses, Oak-gardens, 30 houses, Ashrd., 40 houses and 12 garages, Oak-av.; H. Macintosh, East Croydon, 12 houses and garages, Covington-way; B. L. Sutcliffe, 7, Duke-st., S.W.1, 14 garages, Park-rd; Batchelar & Son, Ltd., 39-47, North-end, alterations and additions, North-end, rear 39-47; L. G. Ekins, 99, Leman-st., E.1, shops with rooms over, 292, 294, Brighton-rd.; H. N. Dering, 255, Lower Addiscombe-rd., shop with rooms and offices over, 102, High-st.; P. Richardson, 62, High-st., 17 houses, Beckford-rd.; G. W. Peachey, 7-8, Norfolk-st., W.C.2, 6 houses, Farleyrd., 16 houses, Crest-rd., 14 houses, Croham Valley-rd.; A. J. Caney, 3, Token House-buildings, Moorgate-st., E.C.2, 4 shops with rooms over, London-rd., adj. Goldwell-rd.; C. H. Ridge, Katharine-st., 11 houses, Bensham-lane; A. Duckit, 2, Fairlands-av., 2 houses, Fairlands-av., 4 houses, Grove-rd.; Wylie & Berlyn, The Glade, 4 bungalows, Woodland Way, Ham Farm estate.—Council recommend £225 for improvements, 12, Katharine-st.

Croydon.—C.B. recommend that meter store at Waterworks-yd., Surrey-st., be added to plumber's shop, and that new meter shed be erected at £390. —Council recommend shed for motor vans, etc., in Waterworks-yd., at £280.—2 houses to be built at Waddon waterworks at £1,750.

Doncaster.—T.C. propose to accept tender for Borough Central school at Bennetthorpe to accommodate 960 pupils. Plans by Athron & Dyson, architects.

Ealing.—Plans for Horsendon school, Greenford, at £33,636, and second block of Coston school, Greenford, at £12,574 been approved by B. of E. —H.S. been authorised to make offer for three additional acres of land adjoining Horsendon school site.

East Barnet.—Subject to approval of B. of E., Herts C.C. decided to purchase 10 acres of land at Littlegrove, for site for secondary school.

East Barnet.—Plans approved by U.D.C.: 3 houses, Crescent-rd., D. E. Roads; 4 houses, Eversleigh-rd., G. W. Jackson; 4 houses, Netherlands-rd., —. Stratton; sports pavilion, Folly Farm, for Toc H.

Eastbourne.—Plans approved by T.C. for branch of National Provincial Bank, Ltd., at Seaside. D. Stonham, F.R.I.B.A., architect, Hadley House, Upperton-rd.

Edgware.—C. H. Freeman, L.R.I.B.A., architect, 20, Bedford-row, W.C.1, prepared plans for church hall for Edgware Parish Church.

Edmonton.—Plans approved by U.D.C.: Commercial Structures, Ltd., factory, Bridport-rd.; Chamberlain & Willows, factory, Pretoria-rd.; C. H. Cockrill, shop premises, Cambridge-rd., next to Lister-gardens; London Co-operative Society, store building, Silver-st.; H. Seymour Couchman & Son, 15 houses, Brettenham-rd. and Brookfield-rd.

Epsom.—Williams & Pettett, architects, 1, Ashley-rd., prepared plans for alterations and improvements to Epsom Branch of British Legion.

Essex.—C.C. recommend that Dunmow Ford Bridge be widened at £800; and Bowers bridge be demolished and small by-pass from Dunmow-Little Easton-rd. to join existing Thaxted-rd., with new bridge over Chelmer, be constructed at £8,090.

Fleetwood.—Scheme in course of preparation for public hall and ballroom in Poulton-rd. for accommodation of about 1,000 people. Promoted by R. Roskell, builder, Birch-st.

Folkestone.—Corporation instructed Health Committee to take necessary steps for further 100 houses.—B.E. been instructed to carry out work of repair to roof and loft at Corporation offices. Plans passed: alterations, Bouverie Hotel, 25, Bouverie-rd, East, for Nalder & Collyer.

Gillingham.—T.C. approved: Shop, junction King Edward-rd. and Eastern-rd., by C. J. Howard.

Guildford.—T.C. approved: 3 houses, Friar's Gate, Onslow Village, for Onslow Village, Ltd.

Hadley Wood.—Mr. A. Kingwell, F.R.I.B.A., Beech Hill Park estate, is about to invite tenders for 2 houses on the estate.

Harrogate.—E.C. approved plans by B.S. for school on Wetherby-lane.

Harrow.—B. of E. approved public elementary school for 200 children at Roxborough Park, Harrow, adjoining Roman Catholic Church of Our Lady and St. Thomas of Canterbury.

Hastings.—T.C. approved: 10 houses, Bexhill-rd., St. Leonards, A. Honnor, per Ward, Son & Wray, architects; 2 pairs houses, Downs-rd., Hastings, J. Lester & Son.

Hemel Hempstead.—T.C. approved: 10 semi-detached houses, new road, off London-rd., near Russell-place, for Allengrove; 12 semi-detached houses, Park-rd., for Provis Thorne, Ltd.

Hendon.—U.D.C. approved: garage and petrol-filling station, Finchley-rd., Child's Hill, T. W. Heath; 5 houses, Hillside-grove, Mill Hill, A. M. Krichefski; 4 houses, 27, 29 and 34, Elmgate-gardens and 53, Selvage-lane, Mill Hill, G. Williams; boat-house, "Welsh Harp" p.h., Edgware-rd., Meux's Brewery Co., Ltd.; 3 houses, Southfields, Hendon, H. F. Kettle; 6 shops and flats over, Church-rd., Hendon, H. Clifford Hollis; 52 houses, West-side, Hendon-way, H. Clifford Hollis; 6 garages, Heathfield-gardens, Golders Green, W. J. Ross; bread and milk depot, Edgware-rd., London Co-operative Society; parish hall, St. Michael's Church, Golders Green, Caroe & Passmore; 12 houses, Watford-way, Hendon, F. C. Shippard; extensions to 154-6, The Broadway, Cricklewood, F. W. Woolworth & Co.; 15 houses with garages, Edgeworth-crescent, Hendon, F. Howkins.

Hinckley.—Capt. E. G. Fowler, F.R.I.B.A., County Education Architect, Greyfriars, Leicester, prepared plans for technical school to cost £12,000.

Hitchin.—S. Bridgeman Russell, F.R.I.B.A., architect, 3, Churchyard, Hitchin, prepared plans for extensions to Boy's Grammar school.

Holmfirth (Yorks).—Board of Management of Holme Valley Memorial Hospital (Hon. Sec., G. H. Charlesworth) to add men's ward to the institution. Cost £2,000 to £3,000.

Huddersfield.—Block of offices and shops on a site at present occupied by old warehouse premises in Market-st. Joe Ainley, architect, 55, New-st.

Hyde.—Board of Management of Hyde Hospital to increase accommodation by addition of 44 beds.

Inverness.—Plans passed by Dean of Guild Court for mortuary at Northern Infirmary. John Burnet, Son & Dick, F.R.I.B.A., architects, 239, St. Vincent-st., Glasgow.

King's Lynn.—T.C. to spend £386 on heating in Corn Exchange.—South Lynn School Managers making inquiry for site upon north-east portion of Friars' Field for new school for senior girls.—Plans for St. James's boys' school, including additions to technical institute, received provisional approval of B. of E.

Leeds.—Congregational Union erecting a church hall and schools on Stainbeck-rd., Stainbeck. Plans by Dinsley & Moss, architects, 17, Union-st., Chorley.—Managers of Sacred Heart, Cardigan-rd., are to convert church premises on Birley-rd. for schools.

Leek.—Licensed premises to be known as "Priory Hotel" erected in Abbots-rd. by Marston, Thompson & Evershed, Ltd., brewers, Burton-on-Trent. Plans by A. Wormwell.

Liverpool.—F. J. Sayer to purchase from T.C. land for bakery in Utting-av. East, Norris Green estate.

Liverpool.—Elementary school on Highfield estate, Broadgreen, and for adaptation of 71, Everton-rd. for purpose of school clinic, for E.C.

London (Battersea).—B.C. received sanction of M.H. to borrowing £4,330 for extension and alteration Maternity Hospital, Bolingbroke-grove.

London (Bermondsey).—B.C. received M.H. sanction to £2,775 for purchase of site at junction of Tower Bridge-rd. and Purbrook-st., for maternity and child welfare centre.—B.C. recommend application to M.H. for sanction to borrowing £23,131 for disinfecting station.—Governors of Christ's Hospital, 26-27, Great Tower-st., E.C.3, lock-up garages, store and office, etc., abutting on Barnham-st. and Shand-st.; Seth Taylor, Ltd., Jacob-st., Dockhead, building over site of Caroline-court; J. H. Durant, 109, Keetons-rd., garage to abut on Clements-rd.

London (Bermondsey).—L.C.C. recommend sanction of £3,900 for housing purposes by B.C.

London (Fulham).—B.C. to make application to M.H. for £8,162 for further proposed extension of North Sheen cemetery and erection of chapel, shelter and conveniences, and £52,166 for acquisition Swan Brewery site for housing purposes.—B.C. recommend additions to Pryor's Bank and bandstand chalets in Bishop's-park, at £290 for the works and B.S. to advertise for tenders for works.

London (Hackney).—B.C. recommend brick urinal be erected in place of existing iron structure in Millfields-rd., £450.—Tenders to be invited for reconstruction of Cassland-rd., at £23,900.—B.S. to redecorate corridors and vestibule of Town Hall, at £500.—Plans passed: D. Hamilton, 2 lock-up garages, rear 56, Rushmore-rd., abutting on 59, Mayola-rd.; F. T. Ford, one-story shop, 210, Mare-st.

London (Kensington).—B.C. proposed £400 for garage extensions at Warwick-rd. depot.

London (Lambeth).—B.C. recommend borrowing by B.C. of £10,900 for housing purposes within the borough.

London (Lambeth).—B.C. received L.C.C. sanction to £2,680 for acquisition of site and erection of 4 dwellings in Rommany-rd.—Plans passed: Morris-Singer Co., one-story addition upon site abutting upon Oval-place; Waite & Waite, one-story building adjoining 31, Albert-embankment, Tinworth-st.; Franks & Simons, one-story shops, Crystal Palace-parade; H. Kenchington, garages at 1a, Melbourne-sq.; E. W. Wallis, two-story building, 94 and 96, Acre-lane; P. A. Robson, additions, 124 and 126, Denmark-hill.

London (Lewisham).—B.C. approved: P. B. Dannatt, 19 houses, Malvons-rd.

London (Peckham).—L.C.C. recommend £2,500 in respect of alterations to Peckham-rye depot be approved.

London (St. Pancras).—B.C. proposing to spend £4,500 on building work on new site for depot in James-st.

London (Wandsworth).—B.C. received M.H sanction to £31,082 for maternity home.—B.E. prepared plans for widening bridge over River Wandle —Council inviting tenders for excavation of site for proposed Clapham baths.

*See also our List of Contracts, Competitions, etc

Lowestoft.—T.C. recommend that, subject to approval of B. of E. and M.H. Council purchase for purposes of elementary school land at Kirkley Run, South Lowestoft.—Council also recommend, subject to approval of M.H. that Council acquire portion of land at Kirkley Run and Birds-lane for erection of houses.

Malling.—R.D.C. approved: Bank premises, High-st., West Malling, for Westminster Bank, Ltd.

Morecambe.—M.H. held inquiry into application of Corporation to borrow £40,000 to build new town hall and municipal offices on site at east end of Promenade.

Morecambe and Heysham.—T.C. approved: Nuttall's Breweries, Ltd., alteration to premises, "Queen's Hotel"; F. Obank & Co., 2 pairs of semi-detached houses, Willacy-parade; Atkinson & Shaw, lay-out of 7 pairs semi-detached and 2 detached houses, new street off Knowlys-rd.

Morpeth.—C. F. Murphy, architect, Newgate-st., preparing plans for hospital on site on common at Walton-rd. and Morpeth for Governors of Cottage Hospital, King's-av.

Newark.—Plans to be prepared for additional block at Magnus grammar school, at £8,000.

Newcastle.—Royal Grammar school is to be extended by erection of music room and art room at extreme ends of main school building. Plans by Marshall & Tweedy, architects, and approved by Board of Governors.

Newcastle.—Special Committee have instructed Property Surveyor to prepare sketch plans showing suggested extensions of market space. One of plans is to cover in Newgate-st. traders' site in Hall's-court, site adjoining market.

Newcastle-on-Tyne.—City Council considering crematorium in connection with cemetery at Denton Burn. J. J. Hill, F.R.I.B.A., architect, Emerson-chams., Blackett-st.

Newton Abbot.—U.D.C. approved: 6 cottages, Chudleigh-rd., Kingsteignton, for S. Howe.

Northampton.—E.C. obtained site at Weston Favel for senior school.

North Walsham.—U.D.C. decided on 24 houses in pairs. Proposed site is Stone-rd., leading from Marshgate to Blue Bell Pit.

Norwich.—City Council propose public library at Mile Cross.

Northwood.—Middlesex E.C. approved new secondary school.

Nottingham.—E.C. acquired site in Loughborough-av., West Bridgford, for county secondary school. L. Maggs, F.R.I.B.A., Shire Hall.—At Southwell Diocesan Conference it was decided that plans should be prepared for church house.

Oldham.—Messrs. Freeman, Hardy & Willis, Ltd., of Leicester, acquired site on Market-place for premises.

Oswestry.—Capt. T. Ridge, A.R.I.B.A., architect, Bank-chams., preparing plans for assembly hall on site of "Barla Inn," Llanfyllin, near Oswestry. Cost £3,500.

Padiham.—U.D.C. have under consideration 18 additional houses in Dryden-st.

Parkeston.—L.N.E.R. to construct new open garage at Parkeston, with lock-up accommodation for 30 cars, in place of existing garages. New garages will be attached to Great Eastern Hotel.

Pateley Bridge.—R.D.C. instructed architect, F. Tranmer, A.R.I.B.A., Westminster-bridge, Harrogate, to prepare plans for 10 houses at Birtswith, 16 at Hartwith and 8 at Pateley Bridge.

Royston.—L.M. & S. Rly. propose to build 120 houses.

Sale.—Adshead, Topham & Adshead, A.R.I.B.A., 14, St. Ann's-square, Manchester, been appointed architects for extensions Town Hall and Library, Tatham-rd., for U.D.C. Cost £15,000.

Salisbury.—P.C. propose 20 houses.

Scarborough.—E. Lawrence, Manor-rd., prepared lay-out for commercial garage and houses in Manor-rd.

Sedgley.—U.D.C. to erect 34 houses off Summerlane.

Sheffield.—Trustees United Methodist Church propose building on Manor estate.

Skipton.—James Hartley & Son, Swadford-chams., architects for ambulance hall, Short Bank-rd., for St. John Ambulance and Nursing Association.

Southampton.—Tenders to be invited for church hall to plans prepared by H. Collins, F.R.I.B.A., architect, 30, Portland-st.

Swansea.—C.B. resolved that public library building be heated by centrifugal pump system, and that Borough Architect be instructed to prepare plans and specifications, and to advertise for tenders.

Swinton.—Swinton Nursing Association (Sec., Miss A. K. Blythmann) raising funds for nursing home.

Wardle.—Housing Committee recommended Council to apply to M.H. for sanction to erect 63 houses on site adjoining Ramsden-rd. and Birch-rd.

Warrington.—Architect's Department, Co-operative Wholesale Society, Ltd., 113, Corporation-st., Manchester, preparing plans for shop premises for Co-operative Society, Cairo-st.—T.C. propose additional houses at Winwick.—T.C. to erect public convenience in Victoria-pk. at £440. Plans by B.S.

Wellingborough.—R. Stevenson Henshaw, B.E., preparing plans for erection public baths at £25,000, on site at Cannon-st. depot, or in Castle-rd.

Welwyn Garden City.—U.D.C. proposing 100 houses. Clerk to consider site.

Whitwood (Yorks).—E.C. to erect senior school. Plans by H. Wormald, A.R.I.B.A., County Hall, Wakefield.

Wolverhampton.—A. Eaton Painter, L.R.I.B.A., Washington-buildings, Berry-st., architect for church hall in Merridale-st., for Trustees of St. Paul's Church.

Woodstock.—R.D.C. approved lay-out plan for approx. 320 houses.

Yarmouth.—New plant and alterations to destructor by B.E. at £9,500.

SOUTHERN COUNTIES FEDERATION.

The half-yearly general meeting of the Southern Counties Federation of Building Trades Employers will be held in Ramsgate on Wednesday and Thursday, June 11-12. The headquarters will be at the Granville Hotel, Ramsgate. On the Wednesday there will be a general meeting at the Granville Hotel, when members and delegates will be officially welcomed by the Mayor. A luncheon will then be given by the East Kent Associations, and at 3 p.m. the official photograph will be taken, after which a series of visits are recommended. A reception by the Mayor and Mayoress and dance will be held at the Granville Hotel in the evening. On Thursday a tour of East Kent has been arranged, and lunch, by invitation of Messrs. Alfred Olby, Ltd., will be taken at the Royal Pavilion, Folkestone. In the afternoon the tour will be continued, and a visit to Canterbury Cathedral has been arranged. Full particulars of the meeting are to be obtained from the Secretary and Organiser, Mr. A. Cannon, 34, Russell-square, W.C.1.

CONTRACTS

(Continued from p. xlvi)

WALTHAMSTOW EDUCATION COMMITTEE.

NOTICE TO BUILDERS AND DECORATORS.

The WALTHAMSTOW EDUCATION COMMITTEE invite TENDERS for carrying out sundry works of INTERIOR and EXTERIOR RENOVATION in PAINTING, DISTEMPERING, etc. (during the Summer Vacation) to the following Schools:—

Mission-grove School—Interior and Exterior Renovation.
William Morris School—Interior Renovation.
Chapel End School—Interior Renovation.
Joseph Barrett School—Interior Renovation.
William W. Whittingham—Exterior Renovation.

Copies of the Specifications may be obtained, together with Form of Tender, on application to Mr. H. Prosser, F.R.I.B.A., Architect to the Committee, at these Offices, on and after Tuesday, 3rd June, between the hours of 10 a.m. and 4 p.m. (Saturdays 10 a.m. to 1 p.m.)

Sealed Tenders, endorsed "Tender for Renovations," to be addressed to the undersigned, and delivered through the post only, at the Committee's Offices not later than 4 p.m., TUESDAY, 17th JUNE, on which day at 7.30 p.m. they will be opened.

The Committee do not bind themselves to accept the lowest or any Tender.

S. W. BURNELL,
Director of Education.

Education Committee Offices,
265, High-street, Walthamstow, E.17.
27th May, 1930.

N.B.—The conditions to be complied with as to rates of wages and hours of labour can be seen with the specifications.

UNIVERSITY COLLEGE OF THE SOUTH-WEST OF ENGLAND, EXETER.

TO BUILDERS AND CONTRACTORS.

ERECTION OF A COLLEGE HOSTEL.

The COUNCIL of the UNIVERSITY COLLEGE of the SOUTH-WEST OF ENGLAND invite TENDERS for the ERECTION and COMPLETION of a COLLEGE HOSTEL proposed to be erected at STREATHAM, EXETER, in accordance with the Plans and Specifications prepared by E. Vincent Harris, Architect, 29, St. James's-square, Pall Mall, London, S.W.1.

Persons desiring to tender for the above works must submit their names and addresses to the Registrar, 2, New Buildings, Exeter, not later than 12 o'clock noon on Monday, the 9th day of June, 1930, together with a remittance of £5. This amount will be returnable only to those who send in a bona-fide Tender and do not withdraw the same.

A copy of the Bill of Quantities and Form of Tender will be furnished on the 16th day of June, 1930, to persons who apply as above, after which the Drawings, Specifications, and Form of Contract may be inspected at the Office of the Quantity Surveyor, F. J. Clevely, F.S.I., 58, Gordon-square, London, W.C.1.

The Council do not bind themselves to accept the lowest or any Tender.

A. E. WOODBRIDGE,
Registrar.

26th May, 1930.

HENDON URBAN DISTRICT COUNCIL.

ELEMENTARY SCHOOLS.

The above COUNCIL invite TENDERS for the ANNUAL REPAIRS and DECORATIONS to their SCHOOLS. The work will be required to be done during the Mid-Summer recess.

Form of Tender and Specification may be obtained from Mr. A. O. Knight, Engineer to the Council, at the Town Hall, Hendon, N.W.4, on payment of a deposit of £1 1s. (One Guinea), which will be returned on receipt of a bona-fide Tender.

Sealed Tenders, addressed to the Chairman of the Education Committee, and endorsed "School Decorations," to be delivered to the undersigned not later than 9 a.m. on the 11th JUNE, 1930.

The Council do not bind themselves to accept the lowest or any Tender.

Dated this 27th day of May, 1930.

LEONARD WORDEN,
Clerk to the Council.

Town Hall,
Hendon, N.W.4.

COUNTY BOROUGH OF CROYDON.

HOUSING SCHEME.

MITCHAM-ROAD ESTATE, CROYDON.

NOTICE IS HEREBY GIVEN that the COUNCIL are prepared to receive TENDERS for the ERECTION of 52 HOUSES at MITCHAM-ROAD ESTATE.

Plans and Specification may be obtained from the Borough Engineer, Town Hall, Croydon, on deposit of Three Guineas, which will be returned upon receipt of a bona-fide Tender.

Tenders, on the prescribed Form, to be sent to me by Eleven o'clock in the forenoon on MONDAY, 16th JUNE, 1930.

Tenders will only be received subject to the terms of the Draft Contract, copy of which will be supplied to each Tenderer with the said Plans and Specification.

The Council will not be bound to accept the lowest or any Tender.

JOHN M. NEWNHAM,
Town Clerk.

Town Hall, Croydon,
26th May, 1930.

SIR ANDREW JUDD'S COMMERCIAL SCHOOL, TONBRIDGE.

TO BUILDERS.

The GOVERNING BODY of the above-named SCHOOL are prepared to receive TENDERS for ADDITIONS and ALTERATIONS to the SCHOOL PREMISES. Plans and Form of Contract may be seen on application to Mr. W. Campbell Jones, F.R.I.B.A., of Skinners' Hall, 9, Dowgate Hill, E.C.4, to whom applications for Bills of Quantities and Forms of Tender should be made not later than mid-day on FRIDAY, 13th JUNE, accompanied by a deposit of Two Guineas (cheques to be made payable to the undersigned and crossed).

Deposits will be returned provided the Tenderers shall have sent in and not withdrawn a bona-fide Tender.

The Governing Body do not bind themselves to accept the lowest or any Tender.

J. J. LAMBERT,
Clerk to the Governing Body.

Skinners' Hall,
Dowgate Hill,
London, E.C.4.

HERTFORDSHIRE COUNTY COUNCIL.

HITCHIN BOYS' GRAMMAR SCHOOL.

The EDUCATION COMMITTEE are prepared to receive TENDERS for the ENLARGEMENT and IMPROVEMENT of the BOYS' GRAMMAR SCHOOL at HITCHIN.

Persons desiring to tender for the work may see the Drawings, Specifications, Agreement, etc., at the Office of the Architect, Mr. E. B. Russell, F.R.I.B.A., 1, The Churchyard, Hitchin, on and after 5th June, between the hours of 10 a.m. and 4 p.m., except on Saturdays, when they may be seen from 10 a.m. to 12 noon.

A copy of the Schedule of Works (Quantities) and a Form of Tender may be obtained at the Architect's Office upon payment of One Guinea, which will be returned to the Tenderer upon receipt of a bona-fide Tender and the documents which have been supplied to him.

Sealed Tenders, endorsed "Tender for Enlargement of Hitchin Boys' Grammar School," must be delivered to the undersigned, at his Office, not later than 4 p.m. on THURSDAY, 19th JUNE, 1930.

Such security for the due erection of the Works as the Council may require must be given by the Contractor.

The lowest or any Tender will not necessarily be accepted.

ELTON LONGMORE,
Clerk of the County Council.

Education Department,
Hertford,
26th May, 1930.

BOROUGH OF HORNSEY.

BUILDING ALTERATIONS.

The TOWN COUNCIL invite TENDERS for ALTERATIONS to BUILDINGS at their HIGHWAYS DEPOTS at WIGHTMAN-ROAD and FORTIS GREEN.

Plans, Specifications, General Conditions and Forms of Tender may be obtained on application to Mr. W. H. Adams, Borough Engineer and Surveyor, Town Hall, Highgate, N.6.

Tenders must be on the prescribed Form, and delivered or sent by post (sealed and endorsed) so as to be received by the undersigned not later than FRIDAY, the 13th of JUNE next.

The Council reserve the right to decline all or any of the Tenders sent in.

E. B. CROASDELL,
Town Clerk.

Town Hall,
Highgate, N.6.
27th May, 1930.

BOROUGH OF HORNSEY.

BOWLING GREEN.

The TOWN COUNCIL invite TENDERS for the CONSTRUCTION of a CUMBERLAND TURF BOWLING GREEN at THE PRIORY PARK, PRIORY-ROAD.

Plans, Specification, General Conditions and Form of Tender may be obtained on application to Mr. W. H. Adams, Borough Engineer and Surveyor, Town Hall, Highgate, N.6.

Tenders must be on the prescribed Form, and delivered or sent by post (sealed and endorsed) so as to be received by the undersigned not later than FRIDAY, the 13th of JUNE next.

The Council reserve the right to decline all or any of the Tenders sent in.

E. B. CROASDELL,
Town Clerk.

Town Hall,
Highgate, N.6.
27th May, 1930.

PRICES CURRENT OF MATERIALS.*

Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.

	£ s. d.
Best Stocks	4 3 6
Second Hard Stocks	3 18 6

Per 1,000. Delivered at London Goods Stations.

	£ s. d.		£ s. d.
Flettons, at King's Cross	2 12 3	Best Blue Pressed Staffs	9 5 0
Do., grooved for Plaster	2 14 3	Do. Bullnose	9 15 0
Do., Bullnose	3 7 3	Blue Wire Cuts	7 5 0

Best Stourbridge Fire Brick :—

2½ in.	8 11 0	3 in.	10 3 0

GLAZED BRICKS—

Best White Ivory and Salt Glazed Stretchers	21 0 0	D'ble Str'tch'rs	29 10 0
		D'ble Headers	26 10 0
Headers	20 10 0	One Side and two Ends	30 10 0
Quoins, Bullnose and 4½ in. Flats	27 10 0	Two Sides and one End	31 10 0
		Splays, and Squints	28 0 0

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours. Hard Glaze, £5 10s. extra over white.

BREEZE CONCRETE SLABS

Delivered London

	s. d.		s. d.
2 in. per yd. super.	1 11	3 in per yd super	2 9
2½ in. " "	2 4	4 in. " "	3 6

	s. d.		
Thames Ballast	9 9	per yd	delivered 2 miles radius Paddington.
Pit Sand	12 0	" "	
Thames Sand	12 0	" "	
Best Washed Sand	12 6	" "	
¾ in. Shingle for Ferro-Concrete	11 6	" "	
¼ in.	12 0	" "	
¾ in. Broken Brick	11 6	" "	
Pan Breeze	8 0	" "	

Per ton delivered in London area in full van loads. Best Portland Cement. British.

Standard Specification. Test £2 6 0 to £2 8 0 29s. alongside at Vauxhall in 80-ton lots.

Ferrocrete per ton extra on above	0 7 6
Vitrocrete " "	0 7 6
Super Cement (Waterproof)	3 16 0
Roman Cement	8 15 0
Parian Cement	5 15 0
Keene's Cetacent, White	5 15 0
" " Pink	5 10 0
Plaster, Coarse, Pink	3 0 0
" " White	3 12 6
" Fine	5 12 0
Sirapite, Coarse	3 9 0
" Finish	3 17 0
Grey Stone Lime	2 10 9
Chalk Lime	2 10 9
Best Ground Blue Lias Lime	1 17 6
Hair per cwt.	2 2 6
Granite Chippings	1 12 0

NOTE.—Sacks are charged 1s, 9d. each and credited 1s. 6d. if returned in good condition within three months carr. pd.

Stourbridge Fireclay in s'cks 37s. 0d. per ton at rly. dp.

STONE.

	s. d.
BATH STONE.—Delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube	2 10
BEER STONE—RANDOM BLOCK— Free on rail at Seaton Station per ft. cube	2 3
Delivered free on rail Nine Elms, S.R. per ft. cube	3 1½
Selected approximate size one way, 1d. per cubic foot extra; selected approximately three sizes or for special work, 3d. per cubic foot extra.	
PORTLAND STONE.— Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, S. Rly., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube	4 4½
Do. do. delivered on road wagons at above stations, per ft. cube	4 5½
White basebed, 3d per ft. cube extra.	
NOTE.—1d. per ft. cube extra for every foot over 20 ft *average*, and ½d. beyond 30 ft.	
HOLTON-WOOD STONE.— F.O.R. Quarries, Wirksworth, Derbyshire.	s. d.
Random blocks from 10 ft. and over P. ft. cb.	14 0
Sawn two sides "	22 6
Sawn three or four sides "	27 6
YORK STONE, BLUE—*Robin Hood Quality.* Delivered at any Goods Station, London.	
6 in. sawn two sides landings to sizes (under 30 ft. super) Per ft. super	5 6
6 in. rubbed two sides, ditto "	6 0
3 in. sawn two sides slabs (random sizes) "	2 3½
2 in. to 2½ in. sawn one side slabs (random sizes) "	1 6½
1½ in. to 2 in. ditto, ditto "	1 3½
HARD YORK— Delivered at any Goods Station, London.	
Scappled random blocks Per ft. cube	6 3
6 in. sawn two sides landing to sizes (under 40 ft. super) Per ft. super	5 1½
6 in. rubbed two sides, ditto "	6 1½
4 in. sawn two sides slabs (random sizes) "	2 1½
3 in. ditto ditto "	2 10
2 in. self-faced random flags Per yd. super	8

CAST STONE.

Delivered in London area in full van loads, per ft. cube: Plain, 8s. 6d.; Moulded, 9s. 6d.; Cills, 10s. 0d

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	£27 10	3 × 6	£21 0
4 × 9	26 0	3 × 11	25 0
4 × 8	25 0	2 × 11	26 0
4 × 7	23 0	3 × 9	24 0
3 × 8	22 0	2½ × 9	24 0
3 × 7	22 0	3 × 4½	21 0
2½ × 7	21 0	3 × 4	21 0

PLANED BOARDS.

1 × 11	£30 0	1 × 9	£28 0

PLAIN EDGE FLOORING

Inches.	per sq.	Inches.	per sq.
⅝	18/-	1¼	30/-
¾	21/-	1½	34/-
1	24/-		

TONGUED AND GROOVED FLOORING

Inches.	per sq.	Inches.	per sq.
1	24/-	⅝	16/6
1¼	30/-	¾	19/-
1½	34/-	1	24/-

MATCHING (BEST).

ins. BATTENS	s. d.	SAWN LATHS.	s. d.
¾ × 2 per 100 ft.	2 6	Per bundle	2 6

1" AND UP THICK.

	£ s. d.	£ s. d.
Dry Austrian Wainscot, per ft. cube	0 16 0	to 0 18 0
Dry American and/or Japanese Figured Oak, ft. cube	0 14 0	to 0 15 0
Dry American and/or Japanese Plain Oak, ft. cube	0 10 0	to 0 13 0
Dry sq. edged Honduras Mahogany, ft. cube	0 15 0	to 0 18 0
Dry Log cut Honduras Mahogany, ft. cube	0 16 0	to 1 1 0
Dry Cuba Mahogany, ft. cube	1 1 0	to 1 10 0
Dry Teak, ft. cube	0 13 0	to 0 15 0
Dry American Whitewood, ft. cube	0 10 0	to 0 11 0
Best Scotch Glue, per cwt.	4 10 0	to —
Liquid Glue, per cwt.	4 7 0	to 5 10 0

SLATES

First quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 actual.

	£ s. d.		£ s. d.
24 by 12	31 0 0	18 by 10	17 5 0
22 by 12	27 19 6	18 by 9	15 10 0
22 by 11	25 5 0	16 by 10	14 14 6
20 by 12	24 7 6	16 by 8	11 5 0
20 by 10	20 17 6		

TILES.

Delivered at London rate stations in full truckloads of not less than 6 tons. Per 1,000. f.o.r. London.

	£ s. d.
Best machine-made tiles from Broseley or Staffordshire district	5 2 6
ditto hand-made ditto	5 7 6
Ornamental ditto	5 12 6
Hip and valley tiles (per dozen) { Hand-made	0 9 6
{ Machine-made	0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION, PER TON— R.S. Joists, cut and fitted	£12 10 0
Plain Compound Girders	14 10 0
" Stanchions	16 10 0
" In Roof Work	19 10 0

MILD STEEL ROUNDS.—To London Station, per ton

Diameter.	£ s. d.	Diameter.	£ s. d.
½ in.	12 0 0	⅝ in. to ½ in.	10 15 0
⅜ in.	11 0 0	⅝ in. to 2½ in.	10 10 0

WROUGHT-IRON TUBES AND FITTINGS— (Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward, if sent from London Stocks.)

	Tubes. Wrought Mild Steel.	Tubes. Genuine Staffs. Iron.	Fittings. ¼ in. and under.	Fittings. Over ¼ in.	Flanges. ¼ in. and under.	Flanges. Over ¼ in.
	%	%	%	%	%	%
Gas	65	52½	45	47½	55	57½
Water	61½	48½	40	42½	50	52½
Steam	57½	45	35	37½	45	47½
Galv. gas	52½	40	35	37½	45	47½
Galv. water	47½	35	30	32½	40	42½
Galv. steam	42½	30	25	27½	35	37½

*C.I.—HALF-ROUND GUTTERS—London Prices ex Works

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	10d.	7½d.	2½d.
3½ in.	10½d.	8½d.	2½d.
4 in.	10½d.	9½d.	2½d.
4½ in.	11½d.	10½d.	2½d.
5 in.	1/1½	11½d.	3½d.

*O.G. GUTTERS.

3 in.	1/0	10½d.	2½d.
3½ in.	1/0½	10½d.	2½d.
4 in.	1/1½	10½d.	2½d.
4½ in.	1/2½	1/½	2½d.
5 in.	1/5	1/2½	3½d.

*RAIN-WATER PIPES, &c.

Per yd. in 6 ft.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/2½	9½d.	1/2
2½ in. "	1/3	10½d.	1/4½
3 in. "	1/6½	1/1½	1/8½
3½ in. "	1/11	1/4½	1/11½
4 in. "	2/2½	1/7½	2/4½

*The above R.W. Goods prices are subject to an advance of 5% from October 29th, 1929.

L.C.C. COATED SOIL PIPES—London Prices ex Works.

	Bends, stock Pipe. angles. s. d.	Branches, stock angles. s. d.
in. per yd. in 6 fts. plain	2 5	1 9	2 1
2½ in. "	2 9½	1 10½	2 7
3 in. "	3 0	2 1	3 1
3½ in. "	3 3	2 7	3 7
4 in.	3 8	2 11	4 1½

L.C.C. COATED DRAIN PIPES—London Prices ex Works

	Pipe. s. d.	Bends, stock angles. s. d.	Branches, stock angles. s. d.
3 in. per yd. in 9ft. lengths	3 6	4 6	7 0
4 in. " "	4 8	5 5	9 3
5 in. " "	6 3	9 6	15 0
6 in. " "	7 3	11 6	19 0

Gasken for jointing, 41/- per cwt.

IRON—	Per ton in London £ s. d.		£ s. d.
Common bars	11 0 0	to	12 0 0
Staffordshire Crown Bars— Good merchant quality	11 10 0	to	12 10 0
Staffordshire Marked Bars	14 0 0	...	15 0 0
Mild Steel Bars	10 0 0	...	11 0 0
Steel Bars, Ferro-Concrete quality, basis price	9 10 0	...	10 10 0
Hoop iron, basis price	11 10 0	...	12 10 0
" Galvanised	27 0 0	...	28 0 0
Soft Steel Sheets, Black— Ordinary sizes, to 20 g.	11 10 0	...	12 0 0
" " " 24 g.	13 0 0	...	14 0 0
" " " 26 g.	15 0 0	...	16 0 0
Sheets Flat Best Soft Steel, C.R. and C.A quality— Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	15 0 0	...	16 0 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	16 0 0	...	17 0 0
Ordinary sizes, 6 ft. by to 3 ft. to 26 g.	18 0 0	...	20 0 0

No. 1 quality £4 per ton extra.

Flat and Galvanised Corrugated Sheets—			
Ordinary sizes, 6 ft., to 9 ft. to 20 g.	15 10 0	...	16 10 0
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	16 0 0	...	17 0 0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	19 0 0	...	20 0 0
Sheets Galvanised Flat, Best quality— Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker	21 0 0	...	22 0 0
Best Soft Steel Sheets, 22 g. and 24 g.	23 0 0	...	25 0 0
Best Soft Steel Sheets, 26 g.	24 10 0	...	25 10 0
Cut Nails	16 0 0	...	17 0 0

(Under 3 in. usual trade extras.)

METAL WINDOWS.—Standard sizes, suitable for complete house, including all fittings, painting two coats, and delivery to job, average price about 1s. 4d. to 1s. 7d. per foot super.

LEAD, &c.

(Delivered in London.)	£ s. d.
LEAD—Sheet. English, 4 lb. and up	27 0 0
Pipe in coils	27 10 0
Soil pipe	30 10 0
Compo pipe	31 10 0

NOTE.—Country delivery, 20s. per ton extra; lots under 3 cwt. 3s. per cwt. extra, and over 3 cwt. and under 5 cwt., 1s. 6d. per cwt extra. Cut to sizes, 5s. cwt. extra.

Old lead, ex London area, at Mills per ton	£16 10 0

COPPER.

	s. d.
Seamless Copper tubes (basis) per lb.	1 3
Strong sheet "	1 0
Thin "	1 1
Copper nails "	1 11
Copper wire "	2 0

PLUMBERS' BRASS WORK. Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB COCKS FOR IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
29/-	45/-	76/-	153/-	246/-	510/- per doz.

NEW RIVER PATTERN SCREW DOWN STOP COCKS AND UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in	2 in.
41/6	62/-	92/-	174/-	300/-	588/- per doz.

RIVER PATTERN SCREW DOWN MAIN FERRULES.

½ in.	¾ in.	1 in.
39/6	60/-	116/6 per doz

CAPS AND SCREWS.

1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4 in.
7/6	10/-	14/-	23/-	30/-	42/- per doz.

DOUBLE NUT BOILER SCREWS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
/6	11/-	17/-	29/-	36/-	63/- per doz

BRASS SLEEVES.

1¼ in.	2 in.	3 in.	3½ in.	4 in.
10/-	12/-	20/-	24/-	31/- per doz.

NEW RIVER PATTERN CROYDON BALL VALVES, S.F.

¼ in.	½ in.	1 in.	1¼ in.	1½ in.
35/-	56/-	98/-	162/-	228/- per doz.

DRAWN LEAD P. & S. TRAPS WITH BRASS CLEANING SCREW.

	1¼ in.	1½ in.	2 in.	3 in.
8 lbs. P. traps	33/-	41/-	56/-	101/- per doz.
8 lbs. S. traps	35/-	45/-	66/-	126/- "

TIN.—English Ingots, 2/3 per lb. SOLDER.—Plumber's 11d.. Tinmen's 1/1, Blowpipe 1/2 per lb.

PAINTS, &c

Raw Linseed Oil,	in pipes per gallon	0	3 11
" " "	in barrels "	0	4 1
" " "	in drums "	0	4 3
Boiled " "	in barrels "	0	4 3
" " "	in drums "	0	4 5
Turpentine	in barrels "	0	3 10
"	in drums (10 galls) "	0	4 0

Genuine Ground English White Lead, per ton 51 0 0 (in not less than 5-cwt. casks.)

Extra for 1-cwt. kegs over 5-cwt. casks is 5/0 cwt.

* The information given on this page has been specially compiled for THE BUILDER, and is copyright. The aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

PRICES CURRENT OF MATERIALS (*contd.*)

PAINTS, &c. (*contd.*)

GENUINE WHITE LEAD PAINT.

		£	s.	d.
"Father Thames," "Nine Elms," "Park," "Supremus," "St. Paul's," "Morganwyte," "Polaco," "J." Brand, and other best brands (in 14-lb. tins) not less than 5 cwt. lots	per ton delivered	70	10	0
Red Lead, Dry (packages extra)	per ton	39	0	0
Best Linseed Oil Putty	per cwt.	0	15	6
Fillcol	"	0	16	6
Size. XD quality	ftn.	0	3	0

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

	Per ft.		Per ft.
15 oz. fourths	2½d.	32 oz. fourths	6½d.
15 „ thirds	3½d.	32 „ thirds	9d.
21 „ fourths	3½d.	Obscured Sheet, 15 oz.	3½d.
21 „ thirds	4½d.	„ „ 21 oz.	4½d.
26 „ fourths	4½d.	Fluted, 15 oz. 7d., 21 oz.	9½d
26 „ thirds	6½d.	Em'lled, 15 oz. 4½d., 21 oz. 6d.	

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED plate in CRATES OF STOCK SIZES.

	Per ft.
¼ Rolled plate	4½d.
⅜ Rough rolled	5½d.
Rough rolled	8½d.
Figured Rolled, Baltic, Oceanic, Arctic, Stippolyte, and small and large Flemish White	5½d.
Ditto, tinted	8½d.
Rolled Sheet	4½d.
White Rolled Cathedral	5d.
Tinned do.	7d.

Cast plate is same price as rough rolled.

"VITA" GLASS.	Per foot. s.	d.
Clear sheet—not exceeding 1 foot	1	0
Do. do. 2 feet	1	3
Do. over 2 feet	1	9
Polished plate—not exceeding 1 foot	1	6
Do. not exceeding 2 feet	3	0
Cathedral—not exceeding 1 foot	1	0
Do. larger sizes	1	6
Horticultural—for greenhouses, etc. Sizes up to 24 inches by 18 inches or not exceeding 3 feet	1	0
3/16 in. Wired Georgian Design. Sizes up to 108 inches long by up to 24 inches wide	2	6

VARNISHES, &c.

		Per Gallon £	s.	d.
Oak Varnish	Outside	0	14	0
Fine ditto	ditto	0	16	0
Fine Copal	ditto	0	18	0
Pale Copal	ditto	1	0	0
Pale Opal Carriage	ditto	1	4	0
Best ditto	ditto	1	12	0
Floor Varnish	Inside	0	18	0
Fine Pale Paper	ditto	0	18	0
Fine Copal Cabinet	ditto	1	2	6
Fine Copal Flatting	ditto	1	0	6
Hard Drying Oak	ditto	0	18	0
Fine Hard Drying Oak	ditto	0	19	0
Fine Copal Varnish	ditto	1	0	0
Pale ditto	ditto	1	12	0
Best ditto	ditto	1	2	6
Best Japan Gold Size		0	12	6
Best Black Japan		0	10	6
Oak and Mahogany Stain (water)		0	12	0
Brunswick Black		0	7	0
Berlin Black		0	14	0
Knotting (patent)		1	5	0
French and Brush Polish		0	17	0
Liquid Dryers in Terebene		0	9	0
Cuirass Black Enamel		0	7	0

Carving at St. John's Church, Perth.

With reference to our article in last week's issue dealing with Miss Phyllis Bone's exhibition of sculpture, Messrs. Donaldson & Burns, of Edinburgh, inform us that we were wrong in stating that Miss Bone "also carried out all the Gothic sculpture at St. John's Church, Perth," and that the decorative Gothic carving at St. John's Church was almost entirely executed and designed by them for the late Sir Robert Lorimer. We understand that Miss Bone was responsible for some of the gargoyle models.

"Smoke and Health."

The Manchester and District Regional Smoke Abatement Committee and National Smoke Abatement Society have published, under this heading, a lecture originally read by Dr. J. S. Taylor, M.D., D.P.H., at the Manchester College of Technology. Dr. Taylor attacks atmospheric pollution from the medical man's point of view. Smoke has a direct bearing, he says, on respiratory diseases, infantile mortality, cancer, rickets in children, anæmia, and tuberculosis. He stresses also the psychological effect of gloom and mentions that actual material results have been demonstrated by the Industrial Fatigue Research Board. The lecture is obtainable, price 2d. net, from 1, Mount-street, Manchester.

NEW BUILDINGS IN SCOTLAND

Dundee.—HOUSING.—The Housing Committee of Dundee Town Council has accepted contracts amounting to £27,000 for the erection of 84 tenement houses in Tullideph-road.

Irvine.—IMPROVEMENTS.—A special meeting of the Town Council has agreed to borrow sums amounting to more than £120,000 for improvements. This sum includes £500 for the provision of children's playgrounds; £50,000 for the new sewerage scheme; £150 for a lavatory at the shore; £60,000 for the Springbank and Clark-drive housing schemes.

Irvine.—HOUSES.—At Irvine Dean of Guild Court plans have been passed for the erection of 80 houses by the Burgh of Irvine on the lands of Springbank, recently acquired by the Town Council. The scheme consists of 16 blocks of four three-apartment houses, and four blocks of four two-apartment houses. The cost is £27,600.

Paisley.—CINEMA.—Negotiations are understood to be taking place by the Good Templar Halls Committee and Paisley T.C. with view to purchase of the whole site at The Cross. A portion of the Good Templar Halls was leased as the Glen Cinema.

Paisley.—BUILDINGS.—The Dean of Guild Court granted the following linings:—Ballantyne & Sons, booksellers, printers and stationers, 41, High-street, to erect a three-story building in New-street; Macarthur Bros., Causeyside-street, warehouse in Causeyside-street; Renfrewshire Agricultural Society, grandstand in connection with their annual show at Ferguslie Park, Paisley.

HOUSING PROGRESS IN SCOTLAND

The following figures show the progress that has been made in State-aided housing schemes in Scotland to April 30, 1930:—

	Completed.	Under Construction.
1919 Act	25,129	—
do. (by public utility societies)	421	—
Private subsidy schemes (1919 Additional Powers Act)	2,324	—
Slum clearance schemes	11,468	2,193
1923 Act:—		
By local authorities	4,030	—
By private enterprise	17,888	1,456
By public utility societies	80	—
1924 Act:—		
By local authorities	43,301	5,553
By private enterprise	1,431	1,513
By public utility societies	127	—
Demonstration houses	17	—
Steel houses erected on behalf of Government by Scottish National Housing Company	2,552	—
	108,768	10,720

BUILDING TRADE WAGES IN SCOTLAND*

The following are the present rate of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur.

	Masons.	Bricklayers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers—Masons'† Bricklayers'† Plasterers'†
Aberdeen	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Airdrie	1/7	1/7	1/7	1/8	1/7	1/7	1/8	‡1/2½ †1/2½
Alexandria	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Arbroath	1/6½	1/6½	1/6½	1/7½	1/6½	1/6½	1/5½	1/1
Ayrshire	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bathgate	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/6½	1/2 to 1/3
Berwickshire	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Blairgowrie	1/7	1/7	1/7	1/7½	1/3	1/7	1/4	10d. to 1/-
Bo'ness	1/7	1/7	1/7	1/8	1/7	1/7	1/8	†1/2½
Broughty Ferry	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Clackmannanshire	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Coatbridge	1/7	1/7	1/7	1/8	1/7	1/7	1/8	‡1/2½ †1/2½
Dumbartonshire	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Dumfries	1/6½	1/6½	1/7½	1/6½	1/6½	1/6½	1/6½	1/2
Dumfriesshire	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Dundee	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Dunfermline	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Dunoon	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
East Lothian	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Edinburgh	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Falkirk	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Forfarshire	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Fort William	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Galashiels	1/6½	1/7	1/6½	1/6½	1/6½	1/6½	1/7	1/2
Glasgow	1/7½	1/8	1/7½	1/8½	1/7½	1/7½	1/8	1/2½
Greenock	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Hamilton	1/7½	1/8	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2
Hawick	1/7	1/7	1/7	1/7–1/7½	1/7	1/7	1/7	1/2½
Helensburgh	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	1/2½
Inverness	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/- to 1/2
Inverurie	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Kilmarnock	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	1/2½
Kincardineshire	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Kinross-shire	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Kirkcaldy	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Kirkwall	1/5	1/5	1/4	1/5	1/5	1/4	1/4	1/-
Lanarkshire	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Leith	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Mid Lothian	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Motherwell	1/7½	1/8	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Peeblesshire	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Perth	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Perthshire	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Peterhead	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Renfrewshire	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Rothesay	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Roxburghshire	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
St. Andrews	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Selkirkshire	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Stirling	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/7½	1/2½
Stirlingshire (Eastern District)	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Stornoway	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
West Lothian	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Wishaw	1/7½	1/8	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½

* The information given in this table is copyright. The rates of wages in the various towns in Ea Wales are given on page 1062.

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	0
Add if in clay	" "	1	0
Add for every additional depth of 6 ft.	" "	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	" "	1	0

CONCRETOR.

		s.	d.
Portland cement concrete in foundation 1 to 6	per yard cube	38	0
Add if in underpinning in short lengths	" "	7	0
Add if in floors 6 in. thick	" "	3	3
Add if in beams	" "	3	9
Add if aggregate 1 : 2 : 4	" "	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	2	6

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	32	0	0
Add if in stocks	"	7	10	0
Add if in Staffordshire blues	"	22	0	0
Add if in Portland cement and sand	"	1	10	0

FACINGS.

		s.	d.
Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1½

POINTING.

		s.	d.
Neat flat struck or weathered joint	" "	0	0	3

ARCHES.

		s.	d.
Extra only to the price of ordinary brickwork :—			
Fair external in half brick rings	" "	0	0	10
Axed in stocks	" "	0	1	9
Rubbed and gauged jointed in putty camber or segmental	" "	0	6	0

SUNDRIES.

		s.	d.
Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0	1	0
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard super	4	6
Three-quarter-inch vertical damp course	" "	9	6
Three-quarter-inch on flats in two thicknesses	" "	6	3
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	" "	1	2

MASON.

		s.	d.
York stone templates fixed	per foot cube	13	0
York stone sills fixed	" "	22	0
Bath stone and all labour fixed	" "	10	6
Beer stone and all labour fixed	" "	15	0
Portland stone fixed	"	20	0

SLATER.

		s.	d.
Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	"	80	9
Do. 24 in. × 12 in. Do. Do.	"	90	0

CARPENTER AND JOINER.

		s.	d.
Fir framed in plates	per foot cube	5	0
Do. joists	" "	5	6
Do. roofs, floors and partitions	" "	6	0
Do. trusses	" "	8	6

		¾"	1"	1½"	2"
Deal rough close boarding	per sq.	35/6	40/-	45/-	72/-
Flat centering for concrete floor, including struts or hangers	"	50	0		
Do. to beams	per ft. sup.	0	11		
Centre for arches	"	1	6		
Gutter boards and bearers	"	1	0		

FLOORING.

		¾"	1"	1¼"	1½"
Deal-edges shot	per sq.	—	44/6	53/-	60/6
Do. tongued and grooved	"	—	49/-	57/6	65/-
Do. matchings	"	45/-	51/-	—	—
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/-	2/6

SASHES AND FRAMES.

		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	" "	2	1
Add for fitting and fixing	" "	0	3
Deal-cased frames with 1 in. inner and outer linings, 1¼ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares, double hung, double hung with pulleys, lines and weights; average size	"	3	9

DOORS.

		1¼"	1½"	2"
Two-panel square framed	per ft. sup.	2/1	2/4	2/6
Four-panel Do.	"	2/5	2/8	2/11
Two-panel moulded both sides	"	2/8	2/11	3/2
Four-panel Do. Do.	"	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

		s.	d.
Deal wrot moulded and rebated	per foot cube	14	0

		1"	1¼"	1½"
Plain deal jamb linings framed	per ft. sup.	1/7	1/8	1/11
Deal shelves and bearers	"	1/4	1/6	1/9
Add if cross-tongued	"	2d.	2d.	2d.

STAIRCASES.

		1"	1¼"	1½"	2"	2½"
Deal treads and risers in and including rough brackets		2/1	2/4	2/9	—	—
Deal strings wrot on both sides and framed		1/8	2/-	2/2	2/8	—

		s.	d.
Housings for steps and risers	each	0	11
Deal balusters, 1 in. × 1¼ in.	per ft. run	0	9
Mahogany handrail: average, 3 in. × 3 in.	" "	6	0
Add if ramped	" "	12	0
Add if wreathed	" "	24	0

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	2/-
Sash fasteners	11½d.	Mortice locks	4/6
Casement fasteners	1/5	Patent spring hinges and letting into floor and making good	19/-
Casement stays	1/2		
Cupboard locks	1/5		

FOUNDER AND SMITH.

		s.	d.
Rolled steel joists	per cwt.	16	3
Plain compound girders	"	19	0
Do. stanchions	"	21	9
In roofwork	"	27	6

RAIN-WATER GOODS.

		3"	4"	5"	6"
Half-round plain rebated joints	ft. run	1/6	1/9	2/-	2/6
Ogee Do. Do.	"	1/9	2/-	2/6	3/3
Rain-water pipes with ears	"	1/9	2/7	—	—
Extra for shoes and bends	each	4/4	5/11	—	—
Do. stopped ends	"	1/11	2/4½	3/7	4/-
Do. nozzles for inlets	"	2/2	2/7	3/10	4/3

PLUMBER.

		s.	d.
Milled lead and laying in flashings and gutters	per cwt.	44	0
Do. Do. in flats	"	43	0
Extra labour and solder in coated cesspools	each	6	9
Welf joint	per ft. run	0	6
Soldered seam	" "	1	3
Copper nailing	" "	0	3

		½"	¾"	1"	1½"	2"	4"
Drawn lead waste	per ft. run	1/2	1/9	2/-	3/4	4/-	—
Do. service	"	1/8	2/2	2/7	3/10	—	—
Do. soil	"	—	—	—	—	—	6/9
Bends in lead pipe	each	—	—	—	—	3/3	8/2
Soldered stop ends	"	1/2	1/8	2/1	2/10	3/6	—
Red lead joints	"	11d.	1/-	1/3	1/11	2/4	4/10
Wiped soldered joints	"	2/10	3/6	4/-	4/11	6/6	9/9
Lead traps and cleaning screws	"	—	—	—	14/7	19/6	—
Bib cocks and joints	"	6/4	9/7	15/4	41/-	—	—
Stop cocks and joints	"	15/4	17/2	25/8	64/-	—	—

PLASTERER.

			s.	d.
Render, float and set in lime and hair		per yard sup.	2	6
Do. Do.	Sirapite	" "	2	9
Do. Do.	Keen's	" "	4	0
Add saw lathing		" "	1	7
Add metal lathing		" "	2	6
(Not including hangers or runners, etc., for suspended ceilings.)				
Portland cement screed		" "	2	2
Do. plain face		" "	3	3
Mouldings in plaster		per 1 girth	0	1½
One-and-a-half granolithic pavings		per yard sup.	5	6

GLAZIER.

		s.	d.
21-oz. sheet plain	per foot sup.	0	8½
26-oz. Do.	" "	1	0
Obscured sheet	"	1	1
⅛-in. rolled plate	" "	0	9
¼-in. rough rolled or cast plate	" "	0	10½
¼-in. wired cast plate	" "	1	4

PAINTER.

		s.	d.
Preparing and distempering, 2 coats	per yard sup.	0	9
Knotting and priming	" "	0	7
Plain painting, 1 coat	" "	0	9
Do. 2 coats	" "	1	2
Do. 3 coats	" "	1	9
Do. 4 coats	" "	2	4
Graining	" "	2	3
Varnishing twice	" "	1	9
Sizing	" "	0	3
Flatting	" "	0	7
Enamel	" "	1	1
Wax polishing	per foot sup.	0	6
French polishing	" "	1	2
Preparing for and hanging paper	per piece, 2/- to 4/-		

*These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

TRADE NEWS

A Metal Window Contract.

Messrs. Williams and Williams, Ltd., Chester, have obtained the contract for metal windows for the whole of the factory and distributing depot which the Ford Company is erecting in Stockholm. The building will be one of the biggest in Sweden. Firms in five countries tendered.

A New Patent.

The Arraber I.R. Carpeting Co., of 18, Berners-street, W., informs us that a patent, No. 329575/30 "for improvements in india-rubber covering of staircases and means for covering the same" was published on Wednesday. We are informed by the patentee, Mr. W. Mainzer, that india-rubber floors and stair-coverings no longer require sticking down, or stair-rods or nosings of any kind. "Arraber" (registered) is supplied in tasteful patterns of carpeting which are being printed in a large variety of colours. Architects for cinemas, hotels, restaurants, etc., may obtain samples on application.

Fireproof Wallboard.

We have received details of a new fireproof wallboard, "Sheetrock," a material distributed in Great Britain by the Anglo-Colonial Trading Corporation, Ltd. This, we learn, is a wall and ceiling material in unit form. It is made of pure gypsum, is factory-cast in broad sheets, ready for nailing to joists and studs, and will not burn or support combustion. We are informed that walls and ceilings constructed of this material will not warp or buckle, and that the sheeting, although strong and rigid, is light enough to be easily handled. It saws and nails like timber, and is a natural insulator. Any decorations, we learn further, may be used satisfactorily. Full details of the material, with directions for applying, may be obtained from 72, Lower Thames-street, E.C.3, or 110, Crawford-street, Glasgow.

Merchants, Manufacturers and Shippers of the World.

We have received for review a copy of the 1930 (forty-fourth) edition of Kelly's Directory of the Merchants, Manufacturers and Shippers of the World, just published in two volumes, price 64s., post free, by Messrs. Kelly's Directories, Ltd., 186, Strand. The contents of this book are, of course, well known to the commercial world, but it is worth emphasising that, in addition to comprising more than one and a half million names, and dealing with over 20,000 places, it is a gazetteer, and contains a fund of facts and figures of the utmost value to the business man, no matter in what class of merchandise he may be interested. The book covers the whole world, is copiously indexed in four languages, and is arranged as follows:—Volume I deals with foreign countries and their possessions. Volume II deals with Great Britain, India and the British Dominions, Colonies, Protectorates, and Dependencies. That part of Volume II which deals with Great Britain has been sub-divided into the following sections:—(1) England, Scotland and Wales; (2) London; (3) Ireland. Each of these sections is again divided into the following sub-sections:—(a) Alphabetical; (b) classified trades; (c) telegraphic addresses; (d) exporters; (e) importers. Reference to any desired information is facilitated by a concise explanation of the arrangement, which is given at the commencement of the book with an example of how to make use of it. The whole of the information has, we learn, been corrected with scrupulous care, and this edition should successfully maintain the reputation which the directory has enjoyed for many years as a guide to the world's trade. It should prove invaluable to builders and contractors who wish to extend their businesses.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes *accepted*.
† Denotes *provisionally accepted*.
‡ Denotes *recommended for acceptance*.
§ Denotes *accepted subject to modifications*.
¶ Denotes *accepted by H.M. Office of Works and H.M. War Office*.

Armthorpe (Yorks).—Additions to "Plough Inn." Messrs. Garside & Pennington, F.R.I.B.A., architects, Ropergate, Pontefract:—
*Firth & Sons, Doncaster.

Barnsley.—Shop, offices and billiard saloon at the junction of Market-hill and Market-street, for Messrs. Montague Burton, Ltd. Mr. H. Wilson, architect, Roundhay, Leeds:—
Main contract—*Wm. Johnson & Sons.
Steelwork—*Redpath Brown & Co., Ltd.
Asphalter—*Tunstall's Rock Asphalte Co., Ltd.

Barnsley.—Licensed premises, Birk-avenue, Kendray, for Barnsley Brewery Co., Ltd., Oakwell Brewery. Mr. H. Roper, resident architect:—
*C. W. Squire & Son, Barnsley.

Barnstaple.—Public conveniences in the Northwalk, for the T.C. Borough Surveyor:—

S. Sanders, Barnstaple	£628
*Wm. Slee & Son, Bear-street, Barnstaple	545

Birkenhead.—Alterations and extensions to Temple-road school, for the C.B. Mr. R. W. Johnston, Architect to the E.C.:—
‡Walter Spencer, Bull-bridge, Aintree, Liverpool £8,358

Birmingham.—Church of St. Peter and Paul in Kingsbury-road, Pype Hayes, Erdington. Mr. B. Foster Stokes, architect, Wharf-road, Tyseley:—
*Malley & Son, Erdington.

Birmingham.—Lock-up shops in Barnabas-road, Erdington. Messrs. Skelcher, Matchin & Watson, architects, 156, Edmund-street, Birmingham:—
*F. C. Price, Ltd., Graveley-lane, Erdington.

Blackpool.—Church hall, for the parishioners of the Marton Parish Church, Blackpool (Vicar, Rev C. W. Macready). Messrs. F. T. & H. G. Waddington, F. & A.R.I.B.A., architects, 52, Abingdon-street:—
*Atherton Brothers, Ltd., Blackpool.

Bradford.—Reconstruction of shop premises at the junction of Kirkgate and Bank-street, for Messrs. Waller Richardson, Ltd.:—
*Wm. Mason & Sons (Leeds), Ltd.

Brentwood.—Additional humus tank, two additional sludge beds, two humus drying beds, alterations to existing humus tank, and other incidental work, at sewage disposal works, for the Brentwood and Billericay Joint Sewage Committee. Messrs. Willcox & Raikes, engineers, Birmingham:—

The Monnoyer British Construction Co., Ltd., London	£2,801 6 5
Arthur J. Arnold, Chelmsford	2,665 0 0
Rigg & Remington, Ltd., London	2,318 11 7
Hussey, Egan & Pickmere, Birmingham	2,159 5 4
*W. & C. French, Buckhurst Hill	2,111 18 2

Brentwood.—Laundry and boiler house at Brentwood Mental Hospital, for the Essex C.C.:—
*Hosking & Son £20,160

Bridge.—Houses, for the R.D.C.:—
Four at Eastry—
*J. W. Waller £1,436 10 0
Four at Ash—
*J. W. Waller 1,429 0 0
(Subject to approval of M.H.)

Butt Lane (Staffs).—Painting of the exteriors of the Alsager and Kidsgrove branch premises, for the Butt Lane Industrial Co-operative Society, Ltd.:—
*A. Steele, Bignall End, Staffs.

Carlow.—Extension to the Mental Hospital, for the District Mental Hospital Committee. Mr. William P. Hade, M.I.C.E.I., architect. Quantities by Mr. M. J. Cullen, quantity surveyor, 48, Grafton-street, Dublin:—

J. Hearne & Son, Waterford	£10,261 12
J. Butler, Belan	9,201 10
W. & A. Roberts, Dublin	8,698 0
*J. & P. Good, Ltd., 55, Gt. Brunswick-street, Dublin	8,197 0

Chelmsford.—Four bungalows at Great Leighs, for the R.D.C.:—
*S. T. Willett, Danbury £918 9 6

Chester.—Public conveniences at Earl's Villas, for the City Council. City Surveyor:—
*W. Vernon & Sons, Ltd., Chester £3,727

Chesterfield.—Premises in Church-lane, for the Brampton Brewery Co., Ltd. Messrs. W. H. Wagstaff & Sons, L.R.I.B.A., architects, 57, Saltergate:—
*John Beckett, Walkden-street, Mansfield.

Chorley.—Mineral water factory at Water-street, for Messrs. T. & R. Smith:—
*T. W. Hall & Sons, Chorley £3,298

Cookham.—Repairs to houses at Dean View, for the R.D.C.:—
*Harding Bros. £331

Coventry.—High-class pumping station building on property at Brownshill Green, for the Corporation. Mr. H. Lapworth, engineer, 25, Victoria-street, Westminster, S.W.1:—
*W. H. Jones & Son, Ltd., Lockhurst-lane, Coventry.

Croydon.—Erection of Virginia-road sub-station, for the C.B.:—

Maides Bros.	£530 0 0
E. H. Smith	525 0 0
E. J. Saunders	515 0 0
D. Waller	513 0 0
R. Mansell	497 0 0
Truett & Steel, Ltd.	497 0 0
*Grace & Marsh, Ltd.	496 0 0
G. Poulton & Sons... (*withdrawn*)	489 3 2

Croydon.—Chemical laboratory at the generating station, for the C.B.:—
*Truett & Steel £634

Croydon.—Switchhouse wiring, for the C.B.:—
*—. Wingfield £398

Croydon.—Erection of Thornton-road sub-station, for the C.B.:—

E. J. Saunders	£630 0 0
Grace & Marsh, Ltd.	618 0 0
Truett & Steel, Ltd.	595 0 0
Maides Bros.	584 3 9
D. Waller	580 0 0
*E. H. Smith	575 0 0
G. Poulton & Sons ... (*withdrawn*)	551 0 0

Croydon.—Erection of Walpole-road sub-station, for the C.B.:—

R. Mansell	£599 0 0
Maides Bros.	578 11 3
E. J. Saunders	563 0 0
G. Poulton & Sons	559 2 0
E. H. Smith	550 0 0
Grace & Marsh, Ltd.	550 0 0
Truett & Steel, Ltd.	535 0 0
*D. Waller	498 0 0

Darking.—Demolition of "The Old Vicarage," 26, South-street, and cottage at corner of St. Paul's-road and Horsham-road, for the U.D.C. Mr. L. J. V. Piper, clerk:—
*W. Wells, Acre-road, Kingston-on-Thames.

Droitwich.—Forty non-parlour type houses on Burrish-street housing estate, for the T.C. Mr. R. E. Hulse, Borough Surveyor:—
*J. & A. Brazier, Ltd., Bromsgrove £14,796

Eccles.—Extension to the electricity sub-station in Corporation-road for the T.C. Borough Engineer and Surveyor:—
*J. Cocker, Ltd., Walkden.

Edinburgh.—Artificers' work, for H.M. War Office:—
*Pirie & Co., Ltd., Edinburgh.

Edinburgh.—For (*a*) additions to Victoria School, Newhaven; and (*b*) painting the Royal High Preparatory School, for the E.C. Messrs. Reid & Forbes, architects, 7, Ainslie-place. Quantities by (*a*) Messrs. A. & T. R. Scott, 27 & 30, Castle-street; (*b*) Messrs. Underwood & Sons, 49, Queen-street:—

	(*a*)	
Mason—		
*T. Millar & Co., Ltd., Hermitage Park, Leith	£6,408	1 0
Joiner—		
*W. & J. R. Watson, Ltd., Iona-street, Edinburgh	2,606	0 0
Plaster—		
*Cousins & Cooper, Falcon-road, Edinburgh	788	12 5
Plumber—		
*J. S. Sinclair, Main-street, Newhaven	468	15 6
Slater—		
*W. & S. Christie, Constitution-street, Leith	355	19 10
	(*b*)	
Painter—		
*P. & J. Gordon, 8, Middlefield, Edinburgh	1,349	15 7

Edinburgh.—Painting the new secondary school building, for Leith Academy, for the E.C. Messrs. Reid & Forbes, architects, 7, Ainslie-place, Edinburgh. Quantities by Messrs. Murray & Baird, 7, Great Colme-street:—
*W. & T. Scott, 4, Alban-street, Leith £3,187 15 7

Glossop.—Rebuilding of the "Victoria Inn," for Messrs. Garlick (Brookside Brewery), Ltd. Ashton-under-Lyne. Messrs. Burton, Percival & Lever, architects, 130a, Stamford-street, Ashton-under-Lyne:—
*Edwin Marshall & Sons, Ltd., Ashton-under-Lyne.

Halifax.—New bakery for the Halifax Industrial Society, Ltd.:—
*E. & T. Bower, Ltd., Halifax.

Hayes.—New block for senior boys and girls, at Townfield Council school, for the Middlesex C.C. Mr. W. T. Curtis, F.R.I.B.A., County Architect:—

C. J. Newby & Bros.	£35,346
H. Knight & Son	35,281
W. Lawrence & Sons, Ltd.	34,881
Albert Monk	33,980
William Lacey, Hounslow	33,798
Ferris Brothers	33,761
Y. J. Lovell & Son, Gerrards Cross	33,485
Fassnidge & Son, Ltd., Uxbridge	33,427
J. Laing & Son, Ltd.	33,083
J. Dorey & Co., Brentford	32,705
Allied Building Corporation, Ltd.	32,562
‡W. S. Try, Uxbridge	32,409

(Remainder of London.)

Headingley (Leeds).—Alterations and additions to the Woodman Hotel. Mr. G. Shipley, architect:—

*Wm. Irwin & Co., Ltd.

Hindley.—Central heating of the infectious diseases hospital, Sandy-lane, for the U.D.C. Mr. P. O. Abbott, Surveyor:—

*Wm. Gaskell & Son, Wigan.

Holloway.—Erection of the Florence Nightingale Memorial Hall, at Holloway, near Bakewell, for the trustees. Messrs. Byrom & Noble, architects, 8, Victoria Bridge, Bury:—

*Cox, Wilson & Sons, Ashford, Bakewell.

Honiton.—Houses, for the R.D.C.:—

6 at Awliscombe—
*A. H. Carnell, Colestocks £2,275

6 at Sidford—
*Layzell & Dommett, Sidford £2,370

4 at Sidbury—
*Layzell and Dommett £1,580

Hornsey.—Works at the Alexandra Park Racecourse, for Messrs. Pratt & Co., Hanover-square, London, W.1:—

*S. G. Goulding, 57, High-street, Hornsey.

Keighley.—External pointing of public library, for the T.C. Mr. E. G. Feigate, A.R.I.B.A., Borough Architect, Gas Offices, Cook-lane:—

*B. R. Roff, 172, Highfield-lane, Keighley £120

Leeds.—Reconstruction of shop premises at 84, Dewsbury-road, for the Stylo Boot Co., Ltd.:—

*Sharp & Law.

Leeds.—Excavations and preparatory work for further extensions at Lady-lane works, for Messrs. Hy. Thome & Co., Ltd. Messrs. Kitson, Barish, Ledgard & Pyeman, architects:—

*Hy. Atkinson & Sons, Ltd.

Leek.—Construction of streets and sewers in connection with the development of Haregate housing estate, for the U.D.C. Mr. W. E. Beacham, surveyor:—

Sanders & Torrence, Stoke	£9,752 0 4
D. Carson, Newcastle	9,153 3 0
C. S. Tomlinson, Alfreton	7,990 0 0
C. Henshall, Newcastle	7,646 17 5
G. H. Greasley, Leicester	7,208 5 6
Derby Road Construction Co., Derby	6,970 3 6
F. W. Morton, Ltd., Macclesfield	6,280 4 9
‡W. Mulcaster, Crewe	5,935 11 9

Liverpool.—Erection of Whitefield-road Council school, for the E.C.:—

‡Unit Construction Company, Ltd. ... £23,254

¶London.—The following contracts have been entered into by H.M.O.W. Department during the week ended the 24th instant:—

Dundee Inland Revenue Office—erection of internal partition, etc.—A. Castler, 17, Miln-street, Dundee.

Handsworth Postman's Office—erection—Maddocks & Walford, Tyburn-road, Birmingham.

Croydon Head Post Office—alterations and extensions—H. D. Ebbutt & Son, 12-13, Wandle-road, Croydon.

Brighouse Employment Exchange—erection—Geo. Hosfall & Son, Valley-road, Liversedge.

Osborne House, Isle of Wight—heating apparatus—The Brightside Foundry & Engineering Co., Ltd., 15, Chicheley-street, S.E.1.

National Physical Laboratory, New Physics Building—heating and hot water services—J. Combe & Son, Ltd., Broadwater-road, Welwyn Garden City, Herts.

London.—Extensions to the County school, for the Middlesex C.C. Mr. W. T. Curtis, F.R.I.B.A., County Architect:—

W. S. Try, Uxbridge	£35,909
J. Dorey & Co., Brentford	35,561
H. Knight & Son	35,470
W. Lawrence & Sons, Ltd.	34,941
Albert Monk	34,190
Ferris Brothers	34,181
William Lacey, Hounslow	34,100
G. Godson & Sons, Ltd.	33,861
Y. J. Lovell & Son, Gerrards Cross	33,535
J. Stewart & Sons, Ltd.	33,496
J. Laing & Son, Ltd.	33,474
‡C. J. Newby & Bros., Southgate	32,998

(Remainder of London.)

London.—Iron railings around the open space at the junction of Southcroft-road and Nimrod-road, for the Wandsworth B.C.:—

*T. W. Palmer & Co., Merton Abbey Ironworks, S.W.19 ..... £123 6 6

London.—External painting works to houses on the Magdalen Park estate, for the Wandsworth B.C.:—

*Triggs & Co., Ltd., Mackay-road, S.W.4 ..... £781

London.—Painting and other works at the Public Libraries, for the Wandsworth B.C.:—

Clapham—
*R. A. Jewell, Ltd. £353

Putney—
*W. Withers & Son, Ltd. 120

Streatham—
*F. J. Rashbrook 212

West Hill—
*W. Withers & Son, Ltd. 128

London.—Greenhouse at Streatham Cemetery, for the Wandsworth B.C.:—

*Carter & Howard, Kingston-road, S.W.20 ..... £425

London.—Construction of a new concrete river wall at Wandsworth-park, for the L.C.C.:—

J. T. Mackley & Co., Shoreham-by-Sea	£36,384 18 4
Howard Farrow, Ltd.	30,037 14 4
Percy Trentham, Ltd., Birmingham	29,532 17 6
A. E. Farr	28,834 18 0
Somerville & Co., Ltd.	28,213 9 0
Topham, Jones & Railton, Ltd.	27,903 9 2
Stewart & Partners, Ltd.	27,831 0 0
Monnoyer British Construction Co., Ltd.	27,149 7 0
Tileman & Co., Ltd.	24,853 14 0
R. Robinson & Co. (Contractors), Ltd.	24,680 9 7
Whittaker, Ellis, Ltd.	24,593 10 3
Bierrum & Partners	24,399 1 8
Lotz & Kier, Stoke-on-Trent	23,965 14 5
John Mowlem & Co., Ltd.	23,546 2 4
Charles Brand & Son	23,136 5 5
Jackaman & Son, Ltd., Slough	22,908 14 0
John Gill, Contractors, Ltd.	22,024 7 11
Walker Weston Co., Ltd.	21,830 2 8
Mears Brothers	20,579 2 9
Peter Lind & Co., Ltd.	18,573 9 0
*K. Holst & Co., Victoria-st., S.W.1	18,542 8 11
Chief engineer's estimate	27,244 0 0

(Remainder of London.)

London.—Factory in Barking-road, East Ham, for Messrs. Clark. Mr. William Allison, F.R.I.B.A., architect, 22, Orchard-street, Portman-square, W.1:—

Rigg & Remington, Ltd.	£10,966 17
George Barker	10,498 0
F. & T. Thorne	10,453 0
R. Cook & Sons, Ltd.	10,414 0
W. J. Cearns	9,870 0
Runham Brown, Bros.	9,865 0

London.—Installation of hot-water heating apparatus at the new county secondary school, Homestall-road, Peckham, for the L.C.C.:—

*W. G. Cannon & Sons, Ltd. £1,889

Maldon.—Public convenience in Marine-parade, for the T.C. Borough Engineer:—

*D. Marven, Galleywood, Chelmsford ... £378

Manchester.—Erection of Manideth-road school, Withington, for the E.C.:—

*James Cocker, Ltd., Walkden.

Manchester.—Alterations to the "Grosvenor Inn" public house, Grosvenor-street and Marsden-street, for Messrs. J. W. Lees & Co., Middleton Junction Brewery. Messrs. Pye & Bennett, L.R.I.B.A., architects, 2, Booth-street, Manchester:—

*T. Milnes, Manchester.

Manchester.—Additions to works, Manor-road, and Lonsdale-road, Levenshulme, for Clifton's Chocolates, Ltd. Mr. H. S. Fairhurst, architect, 55, Brown-street:—

*J. Gerrard & Sons, Ltd., Manchester.
Steelwork—*Banister, Walton & Co., Ltd., Manchester.

Mangotsfield.—Fourteen houses on the Soundwall housing site, for the U.D.C. Mr. F. Wallace, clerk:—

Six houses—
*J. Gunning & Son, Warmley £2,040

Eight houses—
*W. J. Hemborough & Son, Warmley 2,912

Neath.—Factory premises, for Messrs. Batson & Son. Messrs. Thomas Gibb & Edwin Smith, architects, Borough-chambers, Green-street:—

*T. Cole & Sons, Bridge-street-chambers, Neath.

Newcastle-under-Lyme.—New Emporium, for Silverdale Co-operative Society, Ltd. Messrs. G. Hollins, A.R.I.B.A., and Reginald L. Jones, Lloyds Bank-chambers, Newcastle, Staffs:—

*T. Goodwin & Sons, Stoke-on-Trent.

Nuneaton.—Alterations and additions to the Masonic Hall. Mr. H. N. Jepson, A.R.I.B.A., architect, Queen's-buildings, Stratford-street:—

*G. E. & W. Wincott, Nuneaton.

Nuneaton.—Branch premises in Market-place for Montague Burton, Ltd., Hudson Mills, Leeds. Mr. Harry Wilson, architect, 81, North-road, Roundhay, Leeds:—

*G. E. & W. Wincott, Nuneaton.

Olney.—New Council school, to accommodate 200 mixed senior children, for the Bucks C.C.:—

*S. Foster, Ltd., Kempston, Beds. £8,026

Plymouth.—Reconstruction of rest shed at Efford open-air school, for the E.C. Mr. E. Chandler, Cook, Secretary for Education, Rowe-street:—

*W. Sparrow & Son, "Newark," Higher Compton-road £184 10

Preston.—Licensed premises, to be known as the Plough Hotel, on the main Preston to Lytham St. Anne's-road, at Freckleton, for Messrs. J. G. Swales & Co., Ltd., Naval Brewery, Junction-street, Hulme, Manchester. Mr. N. Hartley Hacking, architect, 5, Blackfriars-street, Manchester:—

*J. Cocker, Ltd., Walkden, near Manchester.

Rawtenstall.—12 3-bedroom non-parlour type houses at Burnley-road, Lumb-in-Rossendale, for the T.C. Borough Surveyor:—

*Chris R. Bradley, Underwood House, Newchurch-road, Stacksteads, Bacup.

Retford.—Extensions to St. Alban's Church, for the rector and wardens. Mr. W. H. Wood, F.R.I.B.A., architect, 26, Mosley-street, Newcastle-on-Tyne:—

*E. Bowman & Sons, Stamford £4,498

Rochdale.—Ferro-concrete portal frames, wing walls and parapets, for the Well-I'-the-Lane Bridge widening scheme, for the T.C. S. H Morgan, Borough Surveyor:—

*R. & T. Haworth, Rochdale.

Scarborough.—Home, including resident doctor's house and laying of bowling green, etc., at Woodslands Ravine under Doctor Smart's Trust, for the Trustees:—

*F. W. Plaxton, Scarborough.

Scarborough.—Shopping premises, for Messrs. Montagu Burton, Ltd. Mr. H. Wilson, architect, Roundhay:—

Main contract—*A. Holmes & Co.
Rock asphalter—*Tunstalls Rock Asphalte Co., Ltd.

Southampton.—460 yards run of dwarf iron fencing, for the C.B. Mr. S. G. Stanton, Borough Engineer and Surveyor:—

*Lankester & Son, Ltd., Southampton £90 1 8

Southampton.—Extension works at the Shirley tramway depot, for the C.B. Mr. P. J. Baker, General Manager and Engineer, 161, Above Bar-street, Southampton:—

Fairweather & Ranger, London	£8,637
H. Stevens & Co., Ltd., Southampton	8,296
Wm. Moss & Sons, Ltd., London	8,159
A. E. Jukes & Son, Ltd., Southampton	7,984
Wm. Saunders & Sons, Southampton	7,745
*A. Saunders, Southampton	7,638
Building & Public Works Const. Co., Ltd., Swindon	7,578

Stockport.—Works and factory at Cheadle Heath, for Smith Potato Crisps (1929), Ltd. Mr. Alfred J. Archer, architect, 13, Temple-street, Birmingham:—
*W. J. Whittall & Son, Ltd., Birmingham.

Stockton-on-Tees.—Taking down a brick and stone church, and re-erecting. Mr. H. D. Pritchett, architect, 12, High-row, Darlington:—
*J. & H. Lowry, Newcastle-on-Tyne.

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Stirling.—82 houses, at Raploch, for the T.C. Mr. A. H. Goudie, Borough Engineer:—

*Conoboy & O'Brien, Wallace-street, Stirling	£4,045 15 6
*G. Wilson, Ltd., Stonehouse	3,369 1 8
*G. G. Kirk, Ltd., Port-street, Stirling	135 2 0
*J. Robertson & Son, Campbell-street, Dunfermline	766 7 0
*Robt. Shaw, Byres-road, Glasgow	2,193 19 6
*John Paris & Son, Dunfermline	1,363 12 10
*J. Robertson & Son, Dunfermline	317 6 11
*Robt. Shaw, Byres-road, Glasgow	243 15 3
*Ellery Bros., Murray-place, Stirling	341 13 9
*Forth & Clyde & Sunnyside Iron Co., 105, West George-street, Glasgow	432 12 0

Sunderland.—Administration block at the Royal Infirmary. Messrs. Wm. and T. R. Milburn, F.R.I.B.A., architects, 17, Fawcett-street. Quantities by Mr. T. H. Rae, F.S.I., Lloyds Bank-chambers, Sunderland:—
*Jos. Huntley & Son, Ltd., Marion-street, Sunderland £35,940

Swansea.—Goods warehouse, for the G.W.R. Mr. F. R. E. Davis, Secretary, Paddington Station, W.2:—
*Wm. T. Nicholls, Ltd., Gloucester.

Swansea.—Fencing of the Ravenhill recreation ground, for the C.B.:—
*Blackburn & Sons, Ltd., Preston £832 10 8

Swathling.—Erection of schools for the Southampton Corporation. Mr. S. G. Stanton, Borough Architect:—
*Wm. T. Nicholls, Ltd., Gloucester... £33,349

Tonbridge.—6 houses at Hadlow, for the R.D.C.:—
*A. L. Standen, Tonbridge £2,040
(Subject to sanction of M.H.)

Torpoint.—Bungalow residence at Modder-road, Torpoint. Mr. W. Roseveare, architect and surveyor, 1a, Bank of England-place, Plymouth:—
Solomon Brothers, Peverell, Plymouth

Totnes.—Four parlour-type cottages at Woolston Green, Staverton, for the R.D.C. Mr. W. F. Tollit, architect, 6, Bridgetown:—

F. J. Badcock, Ashburton	£2,240 0
S. Bathen, Paignton	2,100 0
Unity Builders, Paignton	1,983 3
T. Brook, Totnes	1,940 0
F. J. Eates, Ashburton	1,896 16
E. Isaac, Galmpton	1,840 0
*Torquay Building Co., Torquay	1,820 0

Wellingborough.—12 parlour houses in Croyland-road, for the U.D.C. Mr. S. Henshaw, surveyor:—
*A. F. Keach, Burton Latimer £5,065
(In lieu of tender withdrawn.)

Wibsey.—Internal reconstruction at Coll Mills, Odsal Top, for Messrs. Illingworth Morris, Ltd.:—
*M. Booth & Sons

Wolverhampton.—Sunday school in Penn Fields, for the Rev. W. R. Scott, Vicar of St. Philip's Church. Mr. A. W. Worrall, L.R.I.B.A., chartered architect, Queen's-chambers, North-street, Wolverhampton:—
*T. & S. Ham, Wolverhampton.

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